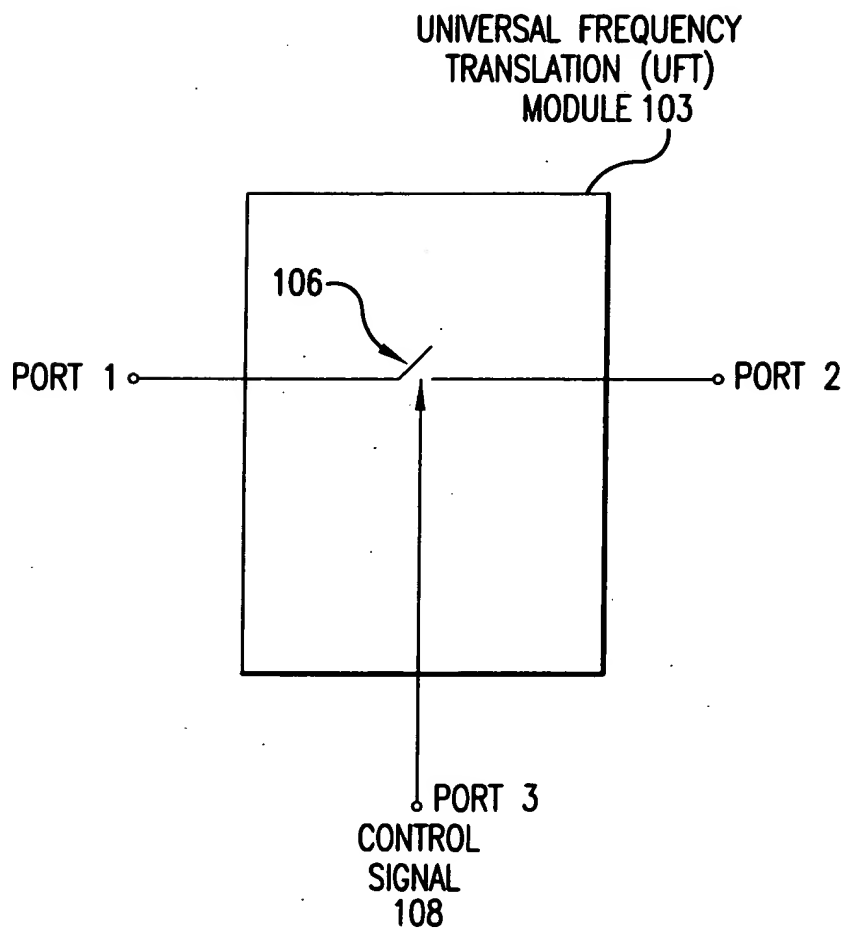


FIG. 1A



**FIG. 1B**

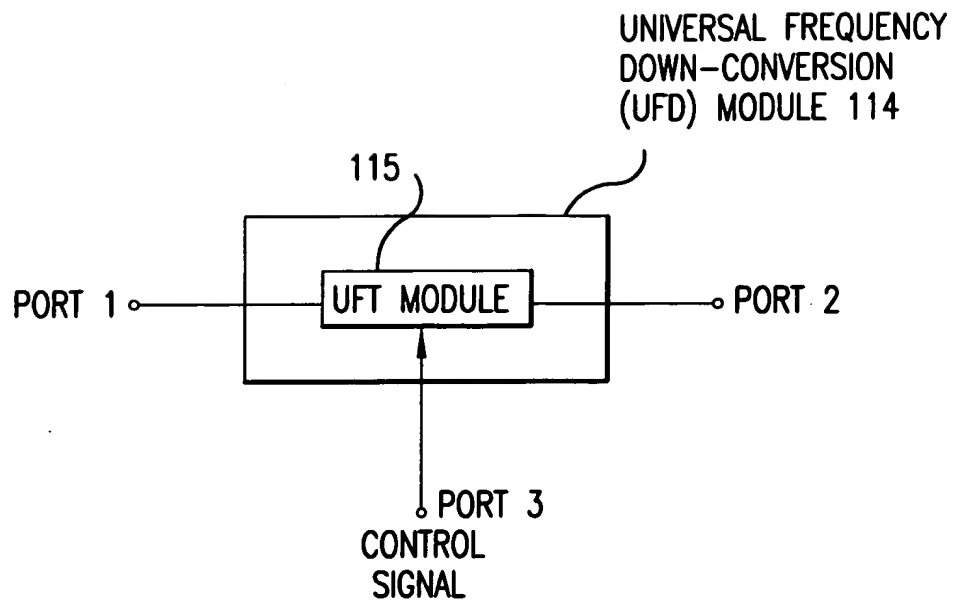


FIG. 1C

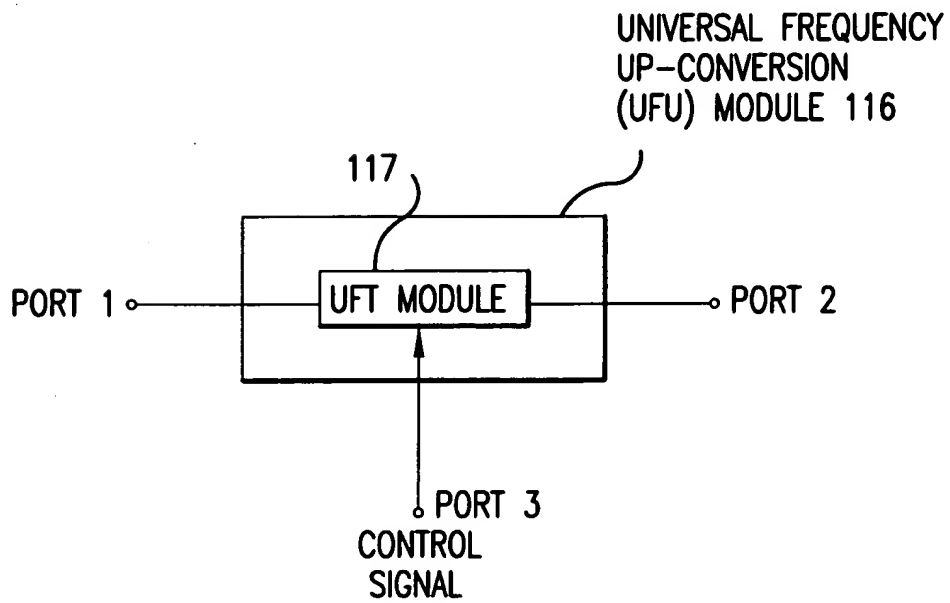


FIG. 1D

106077-1329860

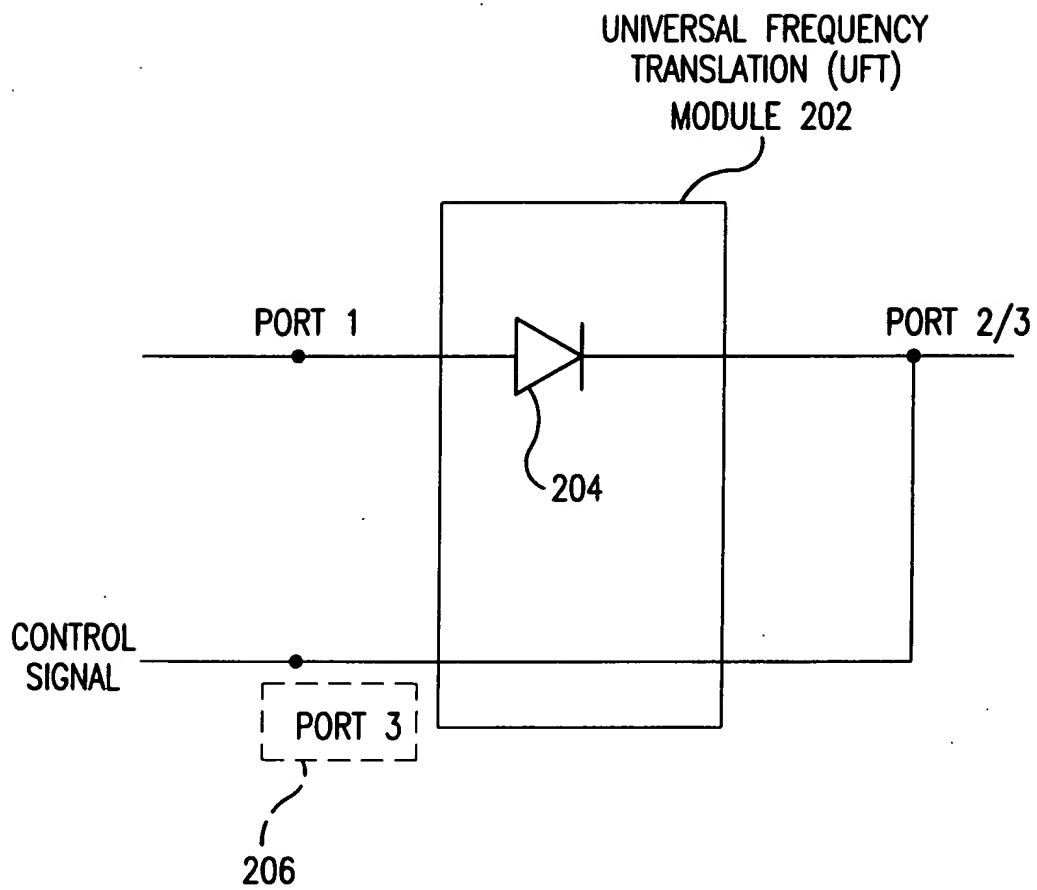


FIG. 2

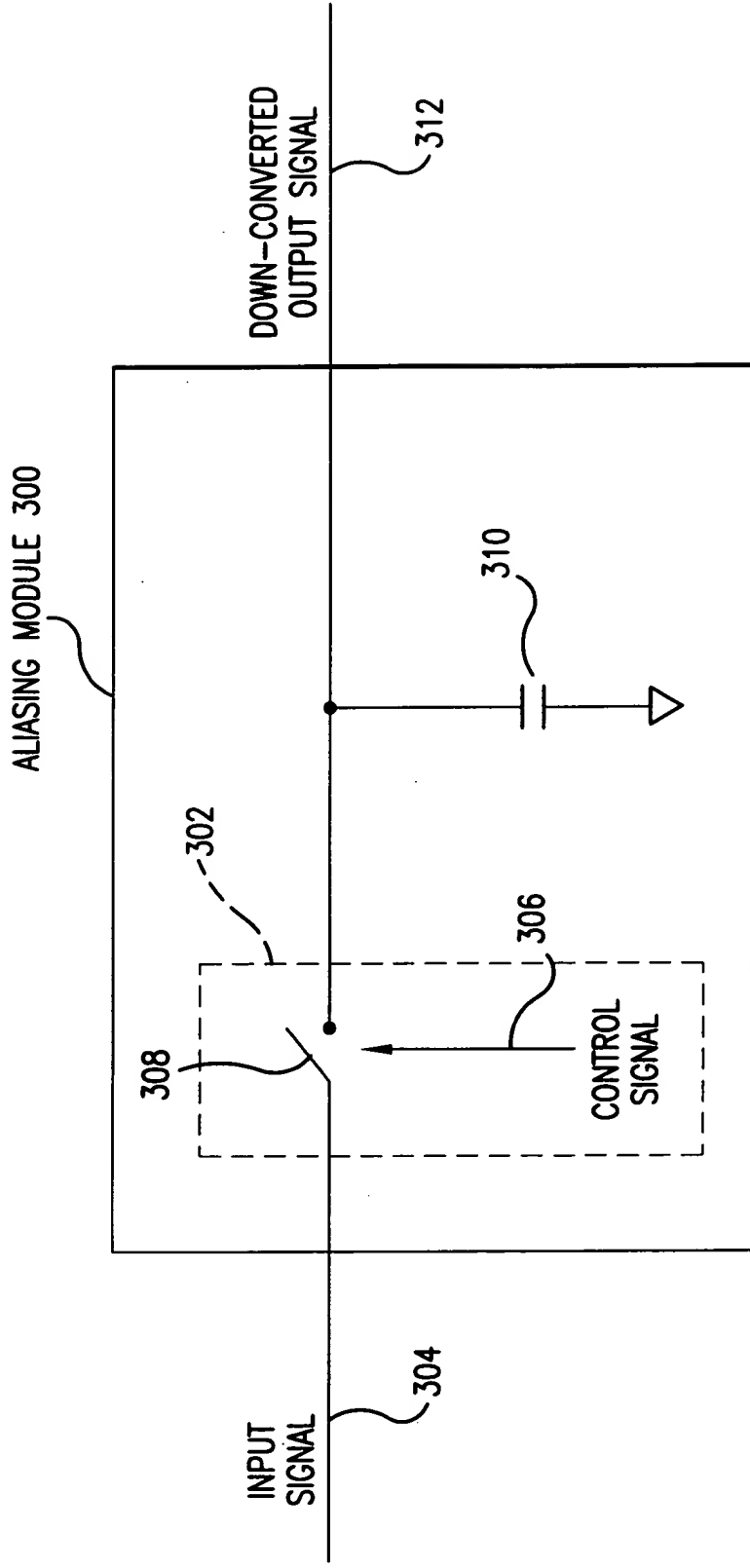


FIG. 3A

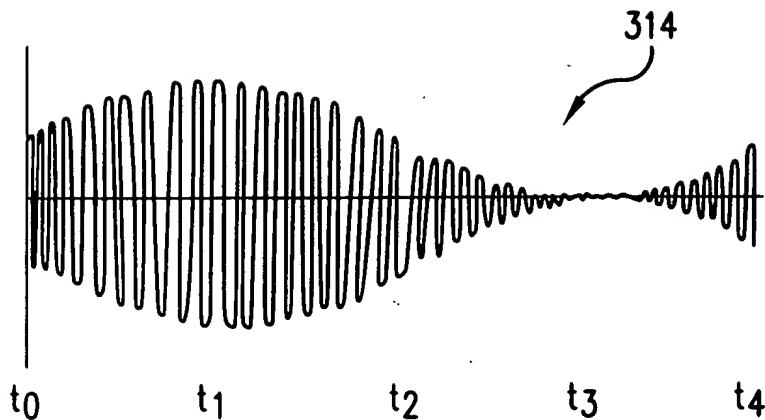


FIG. 3B

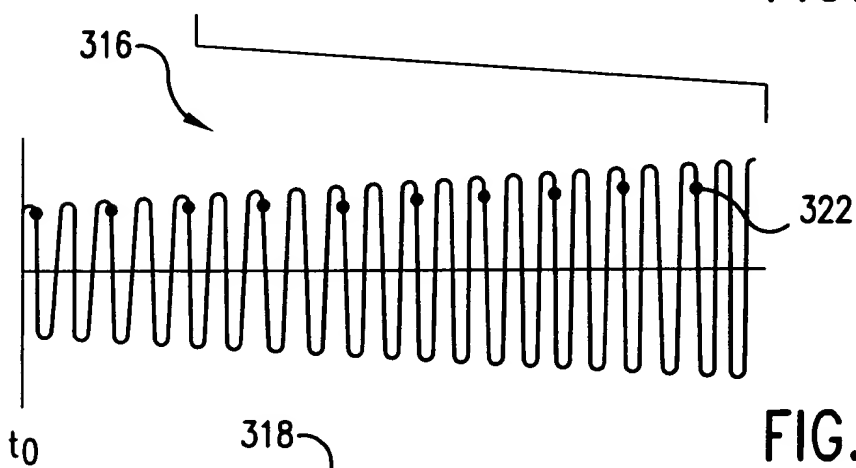


FIG. 3C



FIG. 3D

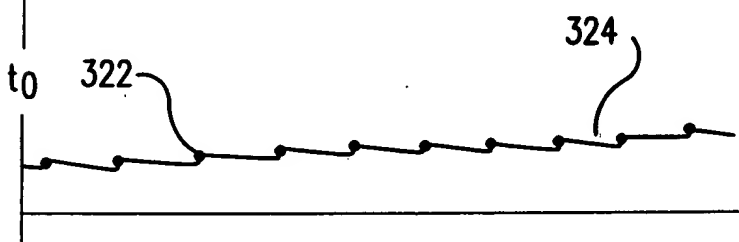


FIG. 3E

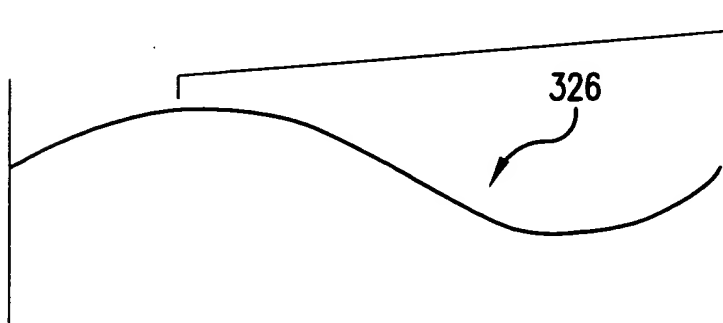


FIG. 3F

FIG. 3A

ALIASING MODULE 300

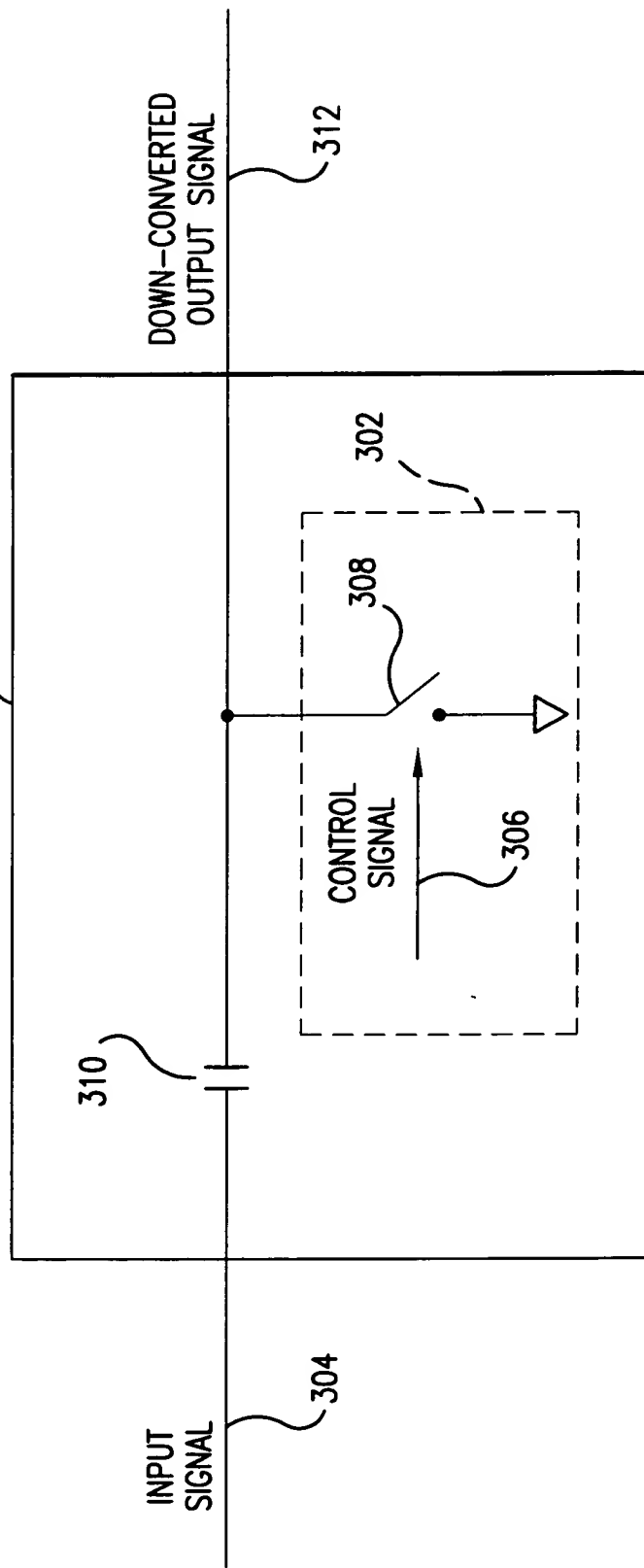


FIG. 3G

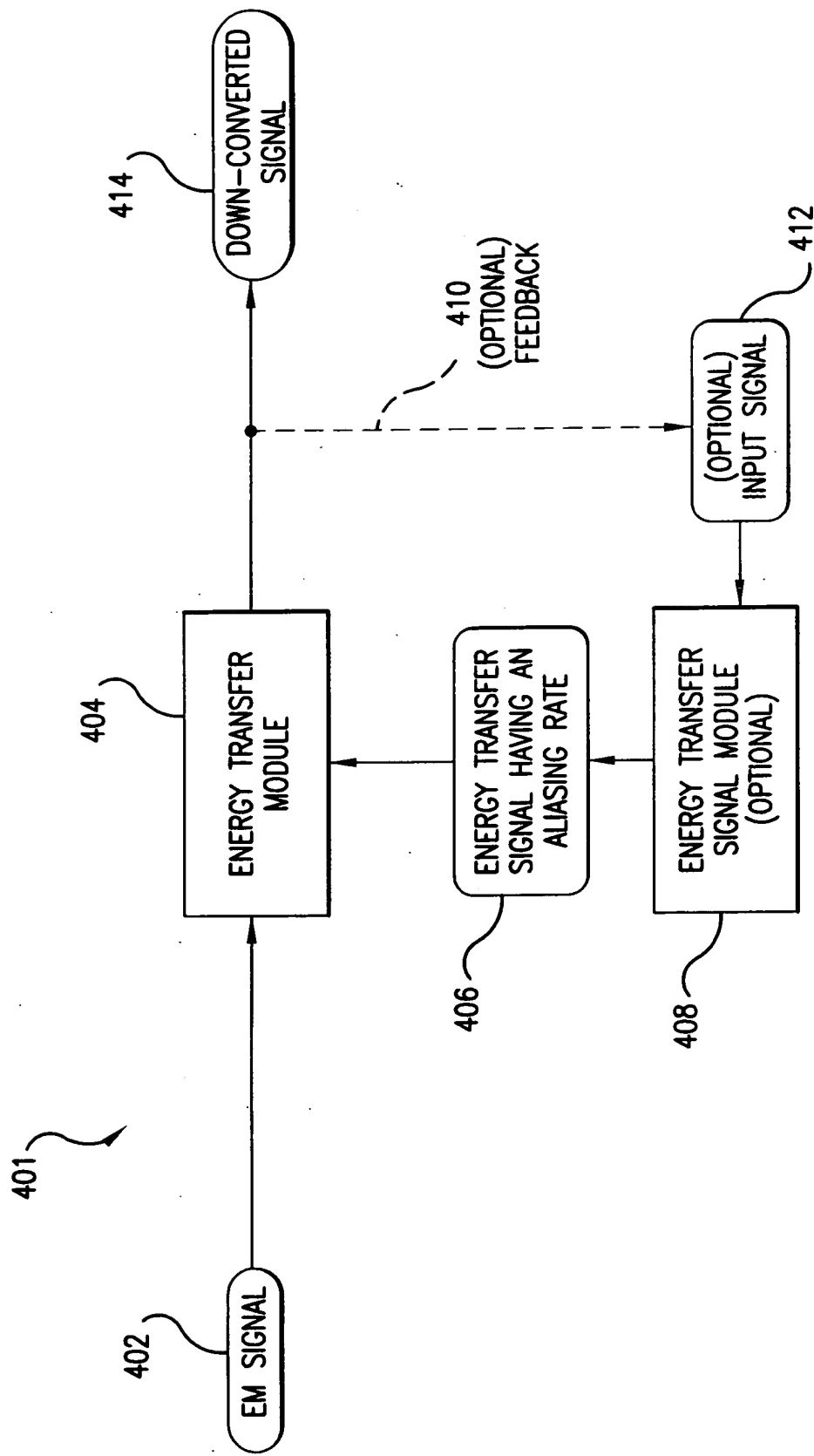


FIG. 4

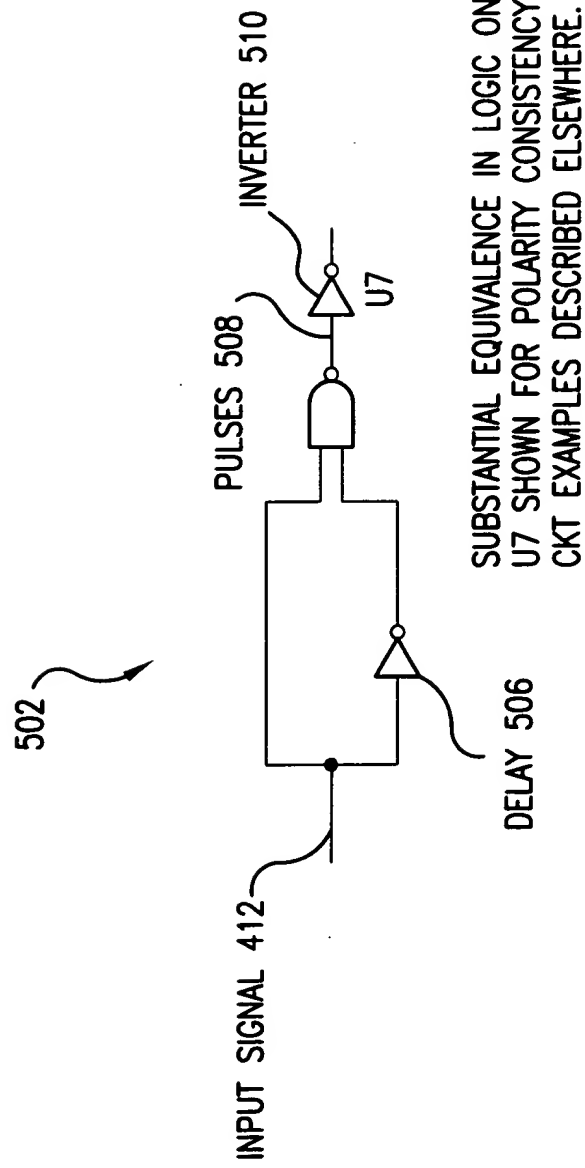


FIG. 5



FIG. 6A

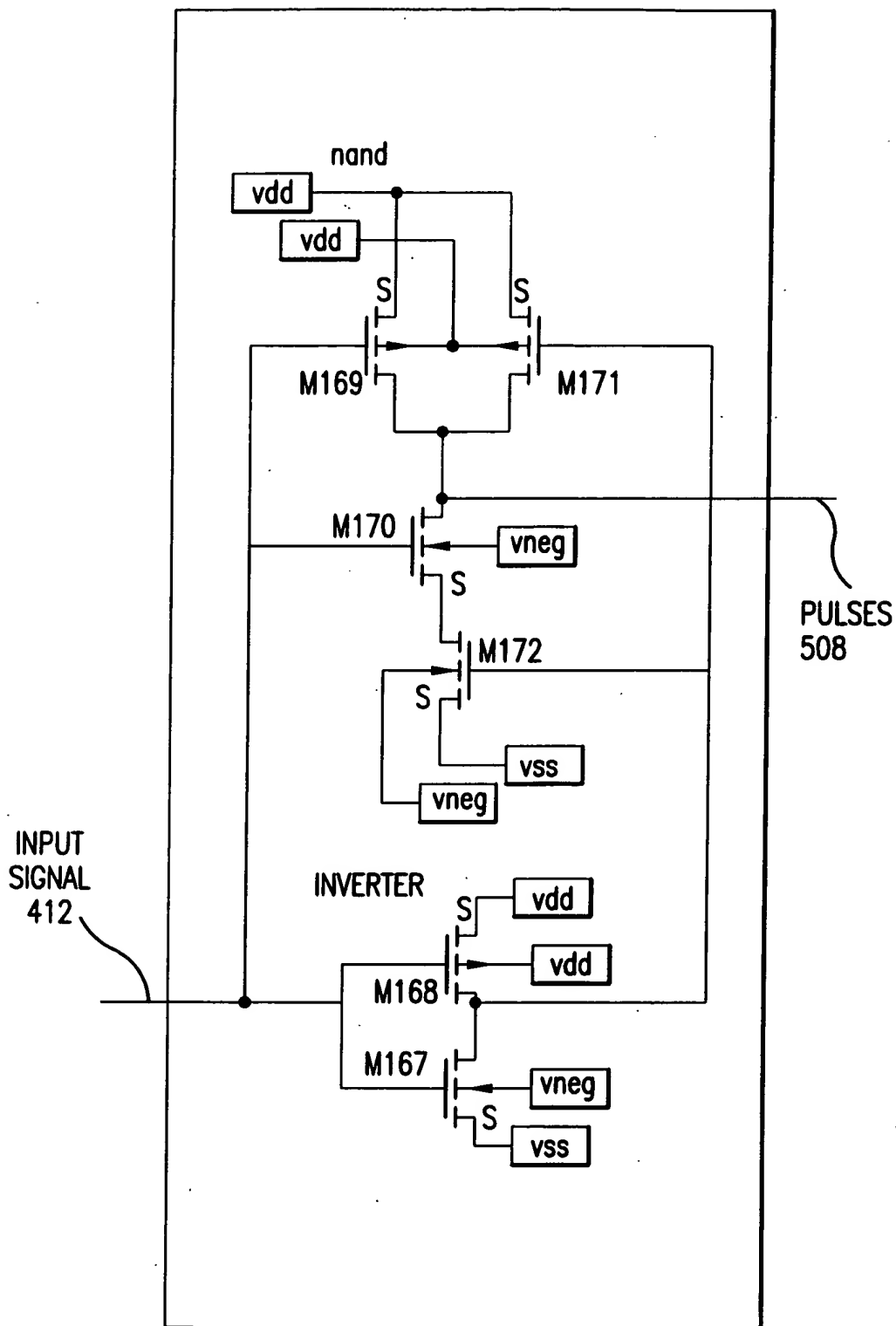


FIG. 6A

FIG. 6B

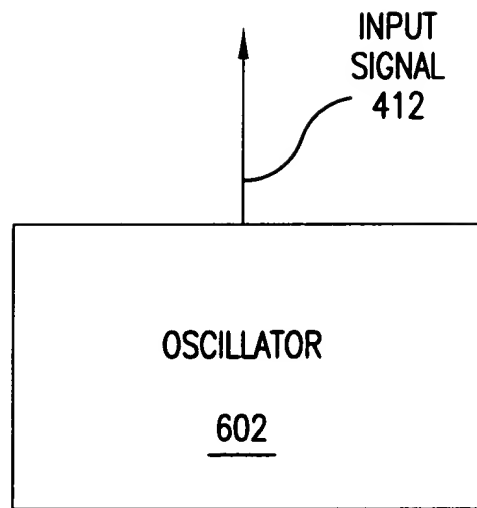


FIG. 6B

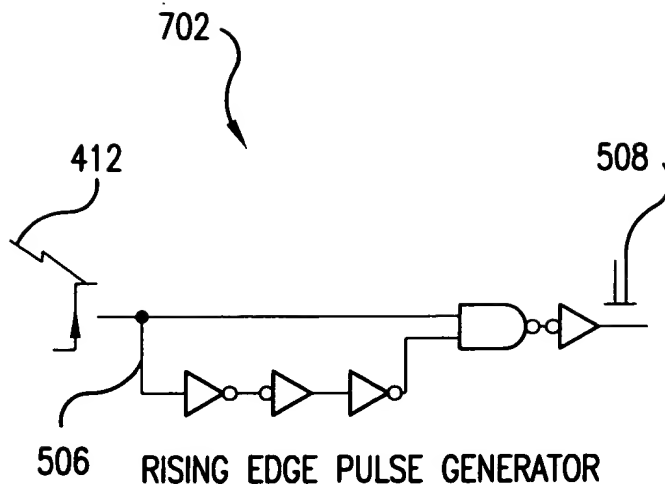


FIG. 7A

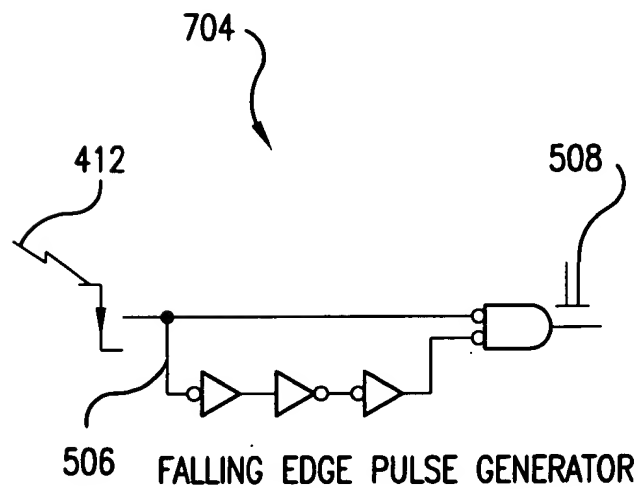
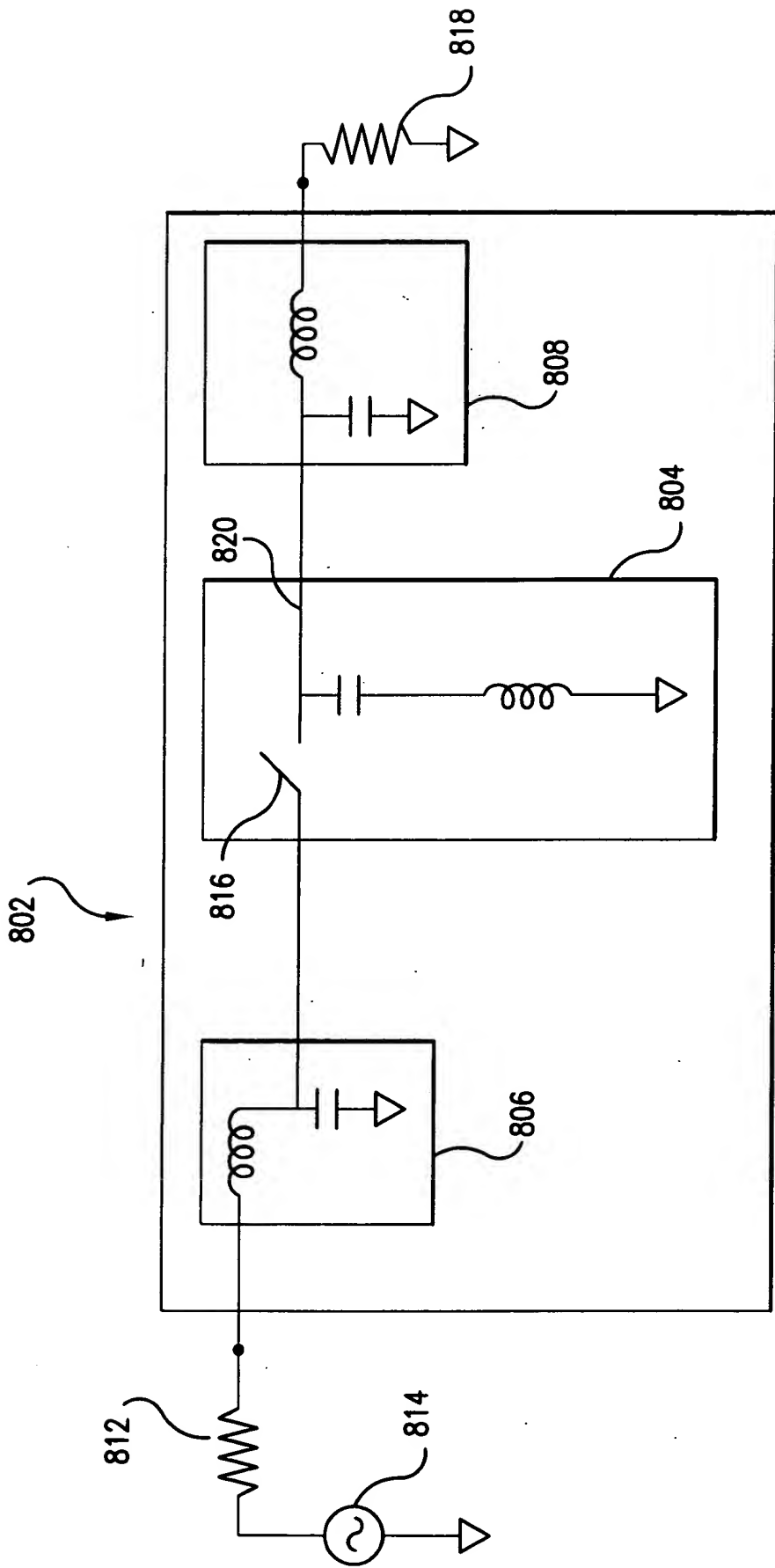
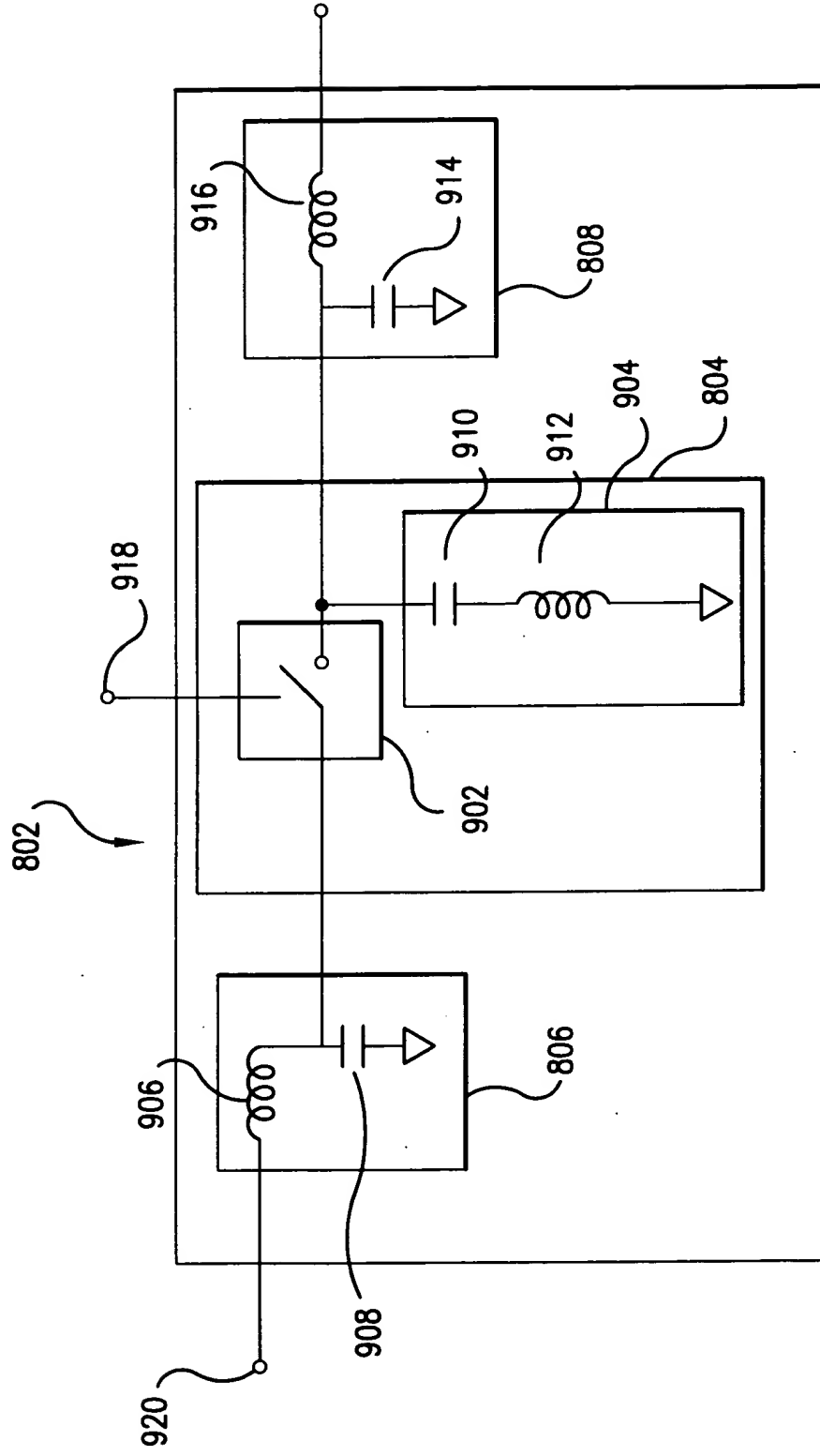


FIG. 7B



IMPEDANCE MATCHED ALIASING MODULE

FIG. 8



ALIASING MODULE

FIG. 9

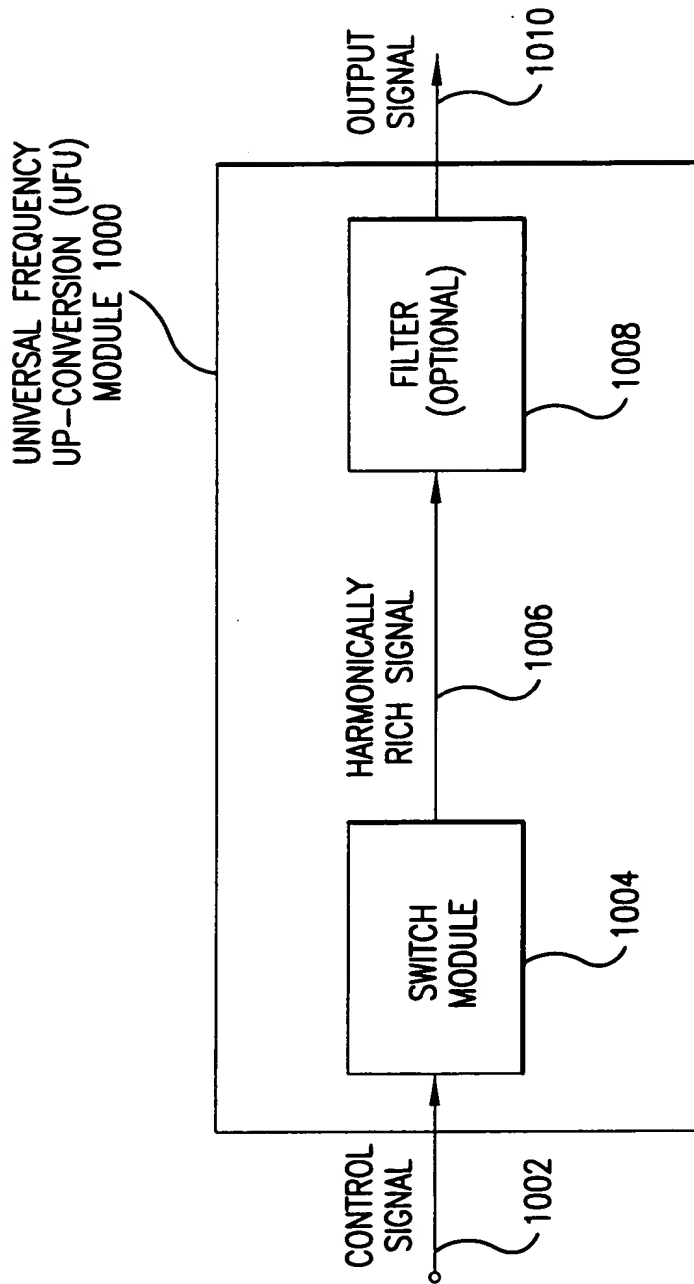


FIG. 10

UNIVERSAL FREQUENCY  
UP-CONVERSION (UFU)  
MODULE 1101

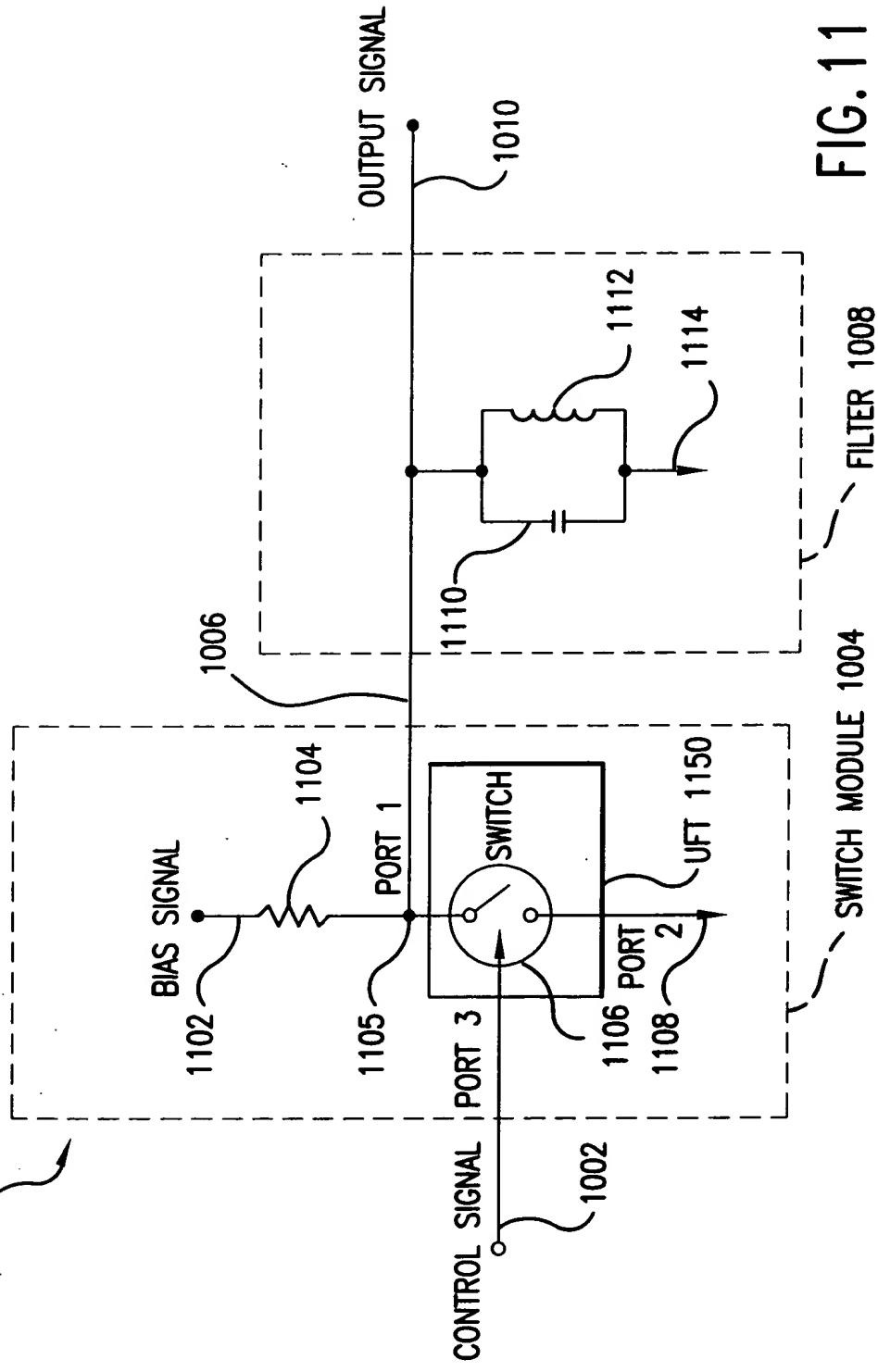


FIG. 11

UNIVERSAL FREQUENCY  
UP-CONVERSION  
(UFU) MODULE 1290

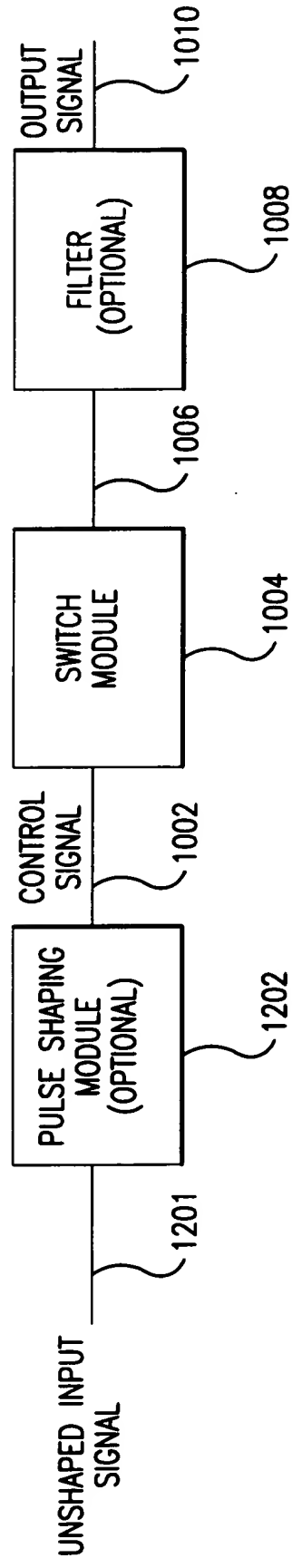
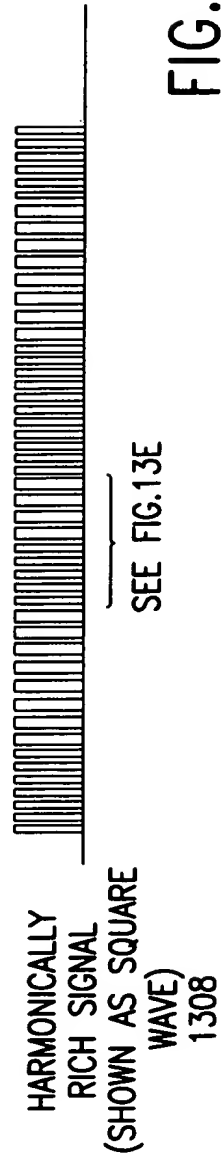
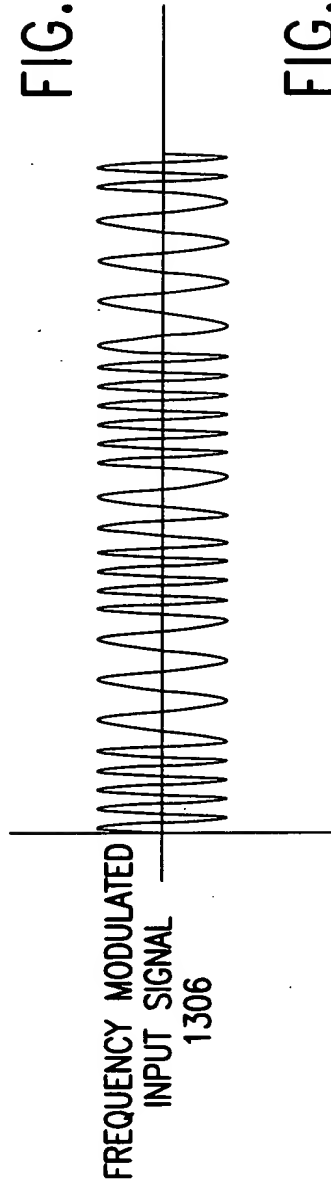
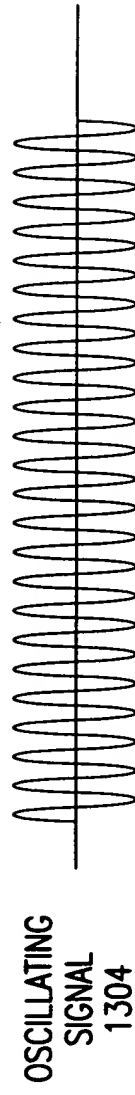
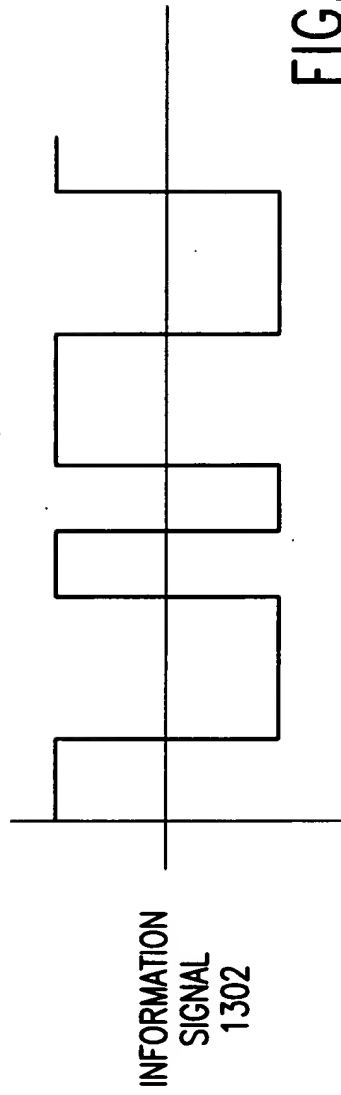


FIG. 12





SEE FIG. 13E

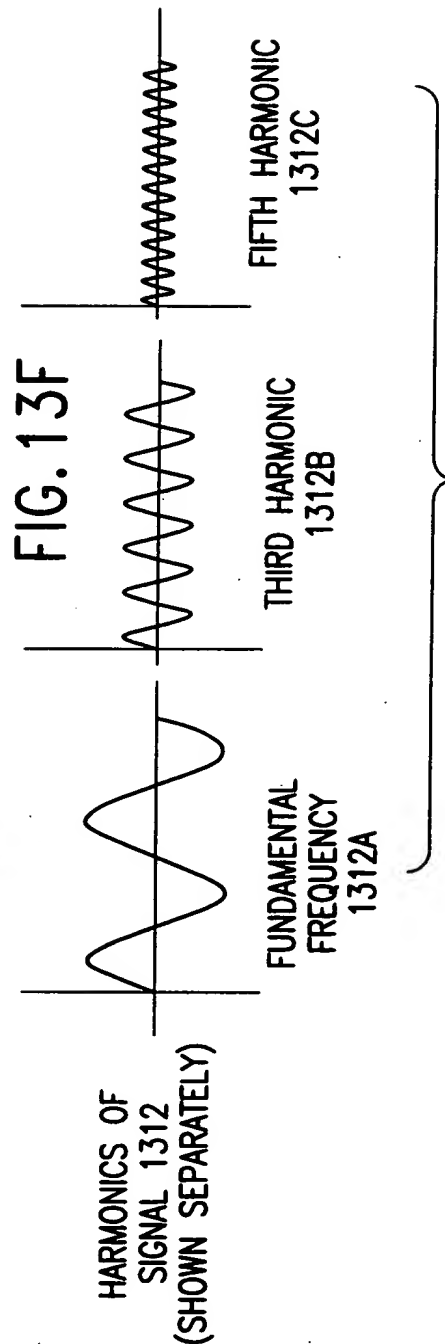
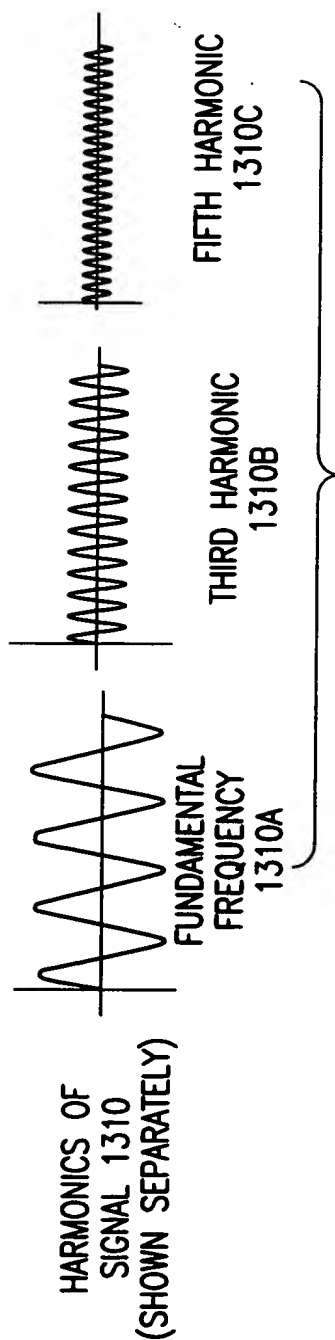
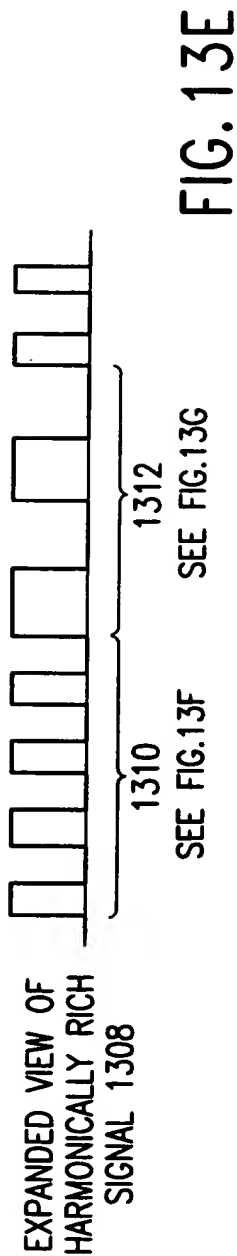


FIG. 13G

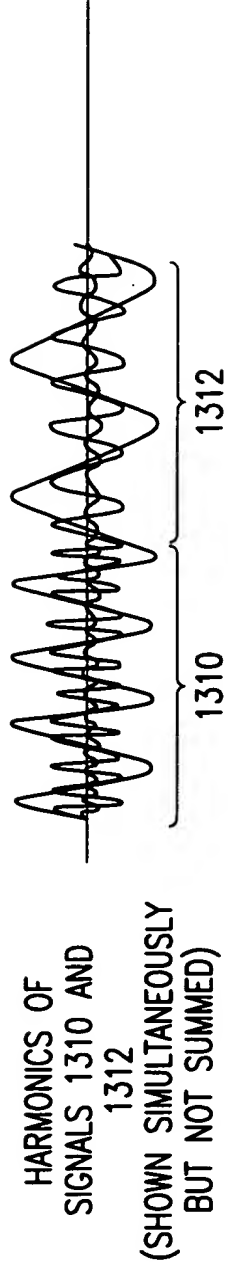


FIG. 13H

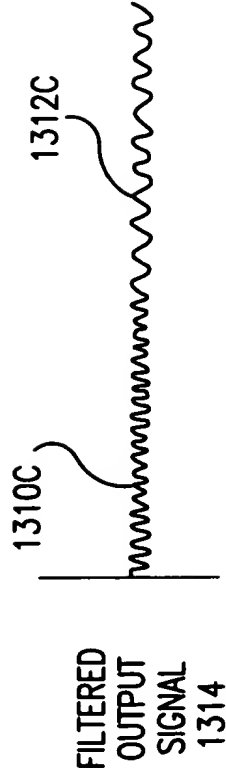


FIG. 13I

UNIFIED DOWNCONVERTING AND  
FILTERING (UDF) MODULE 1402

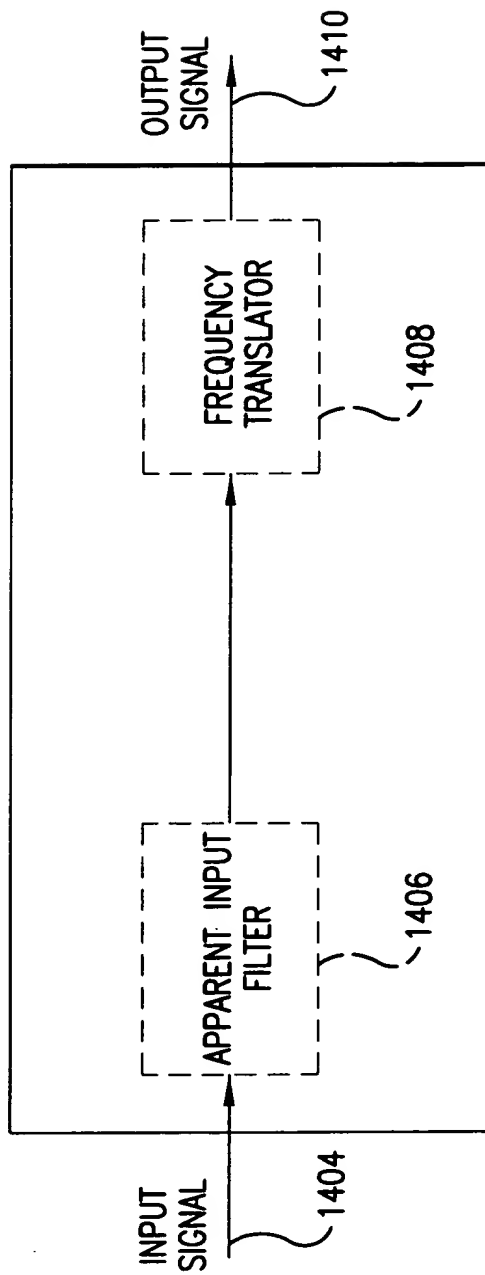


FIG. 14

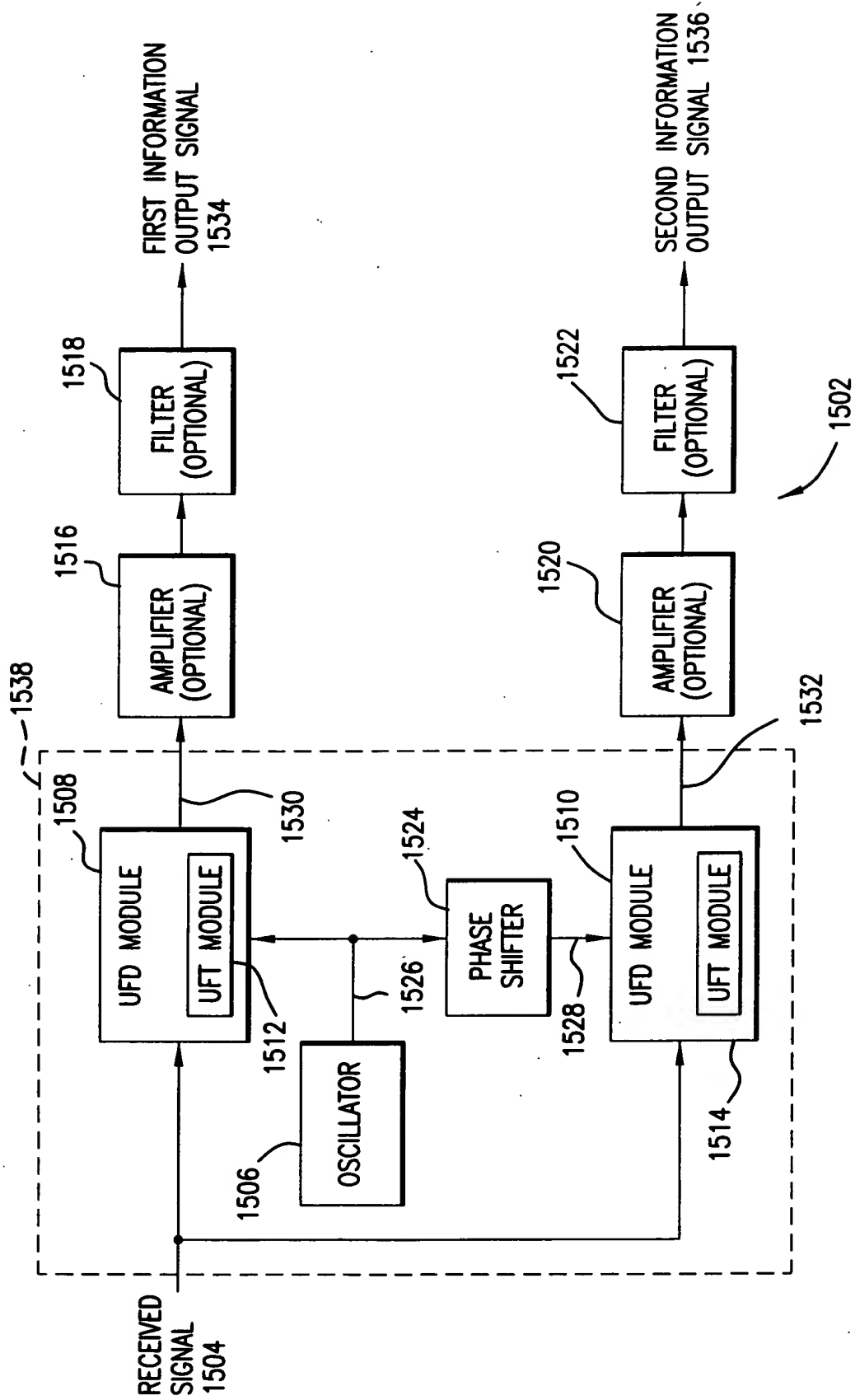


FIG.15

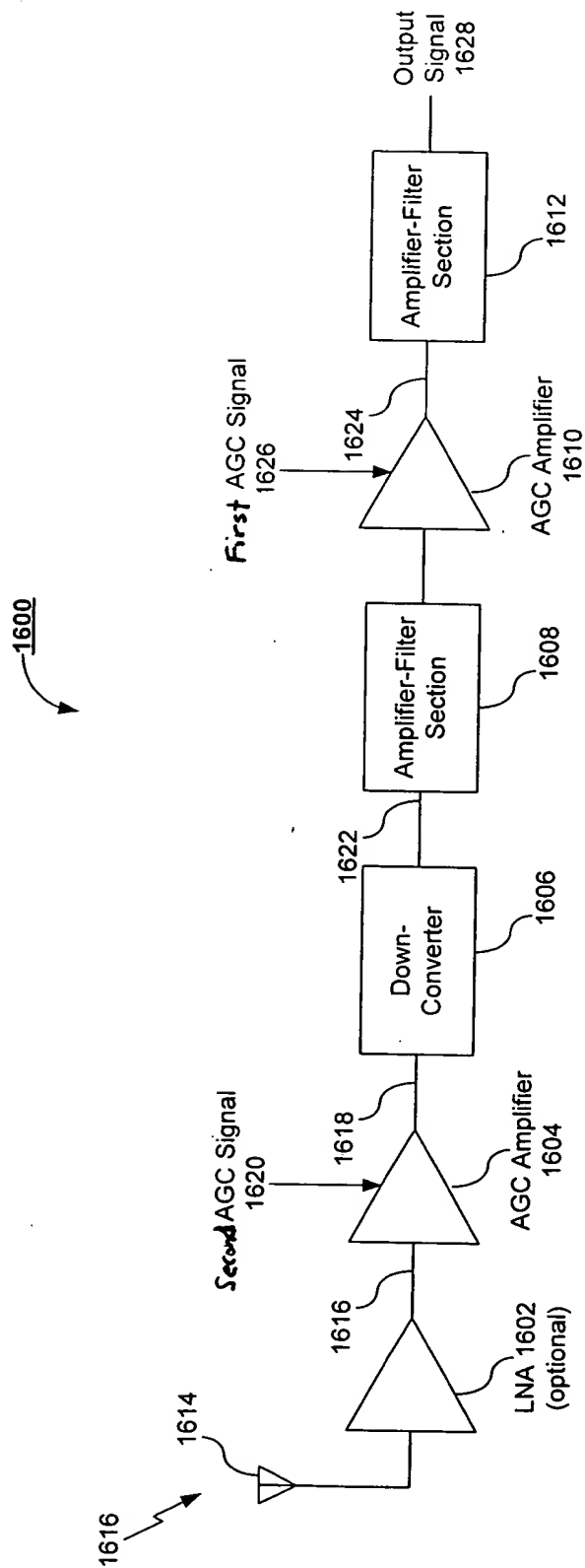


FIG. 16

1700

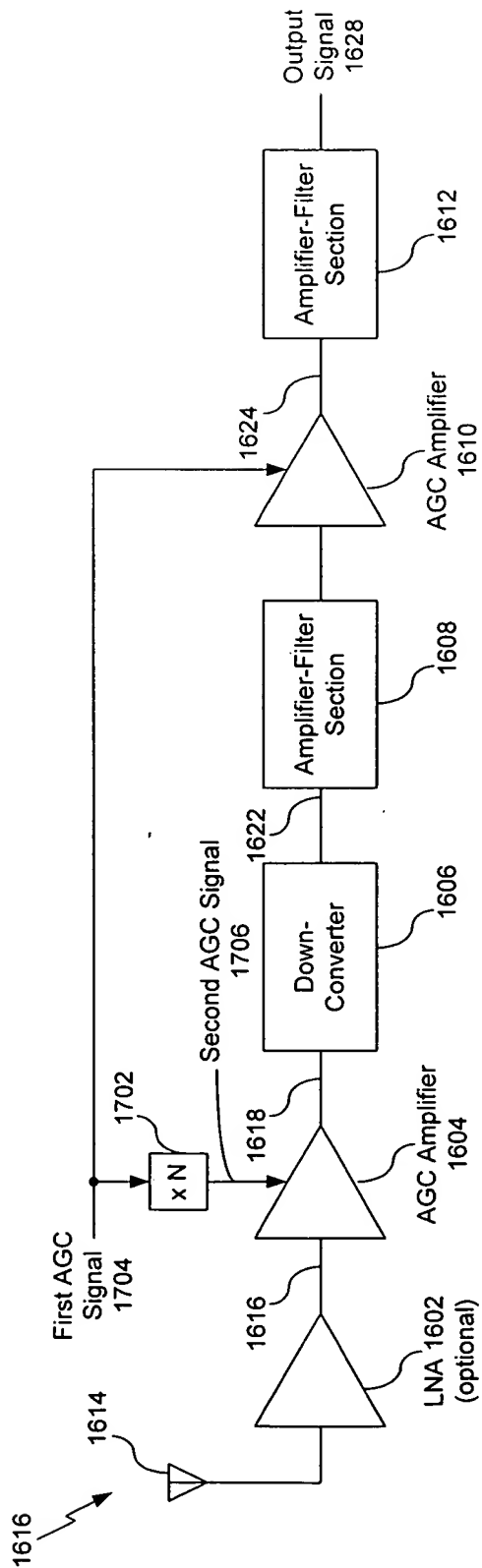


FIG. 17

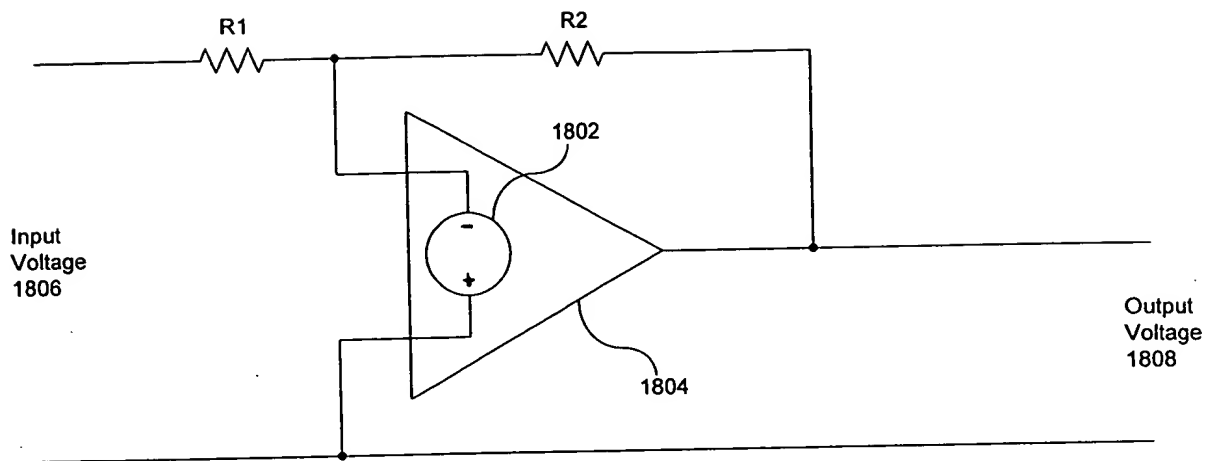


FIG. 18

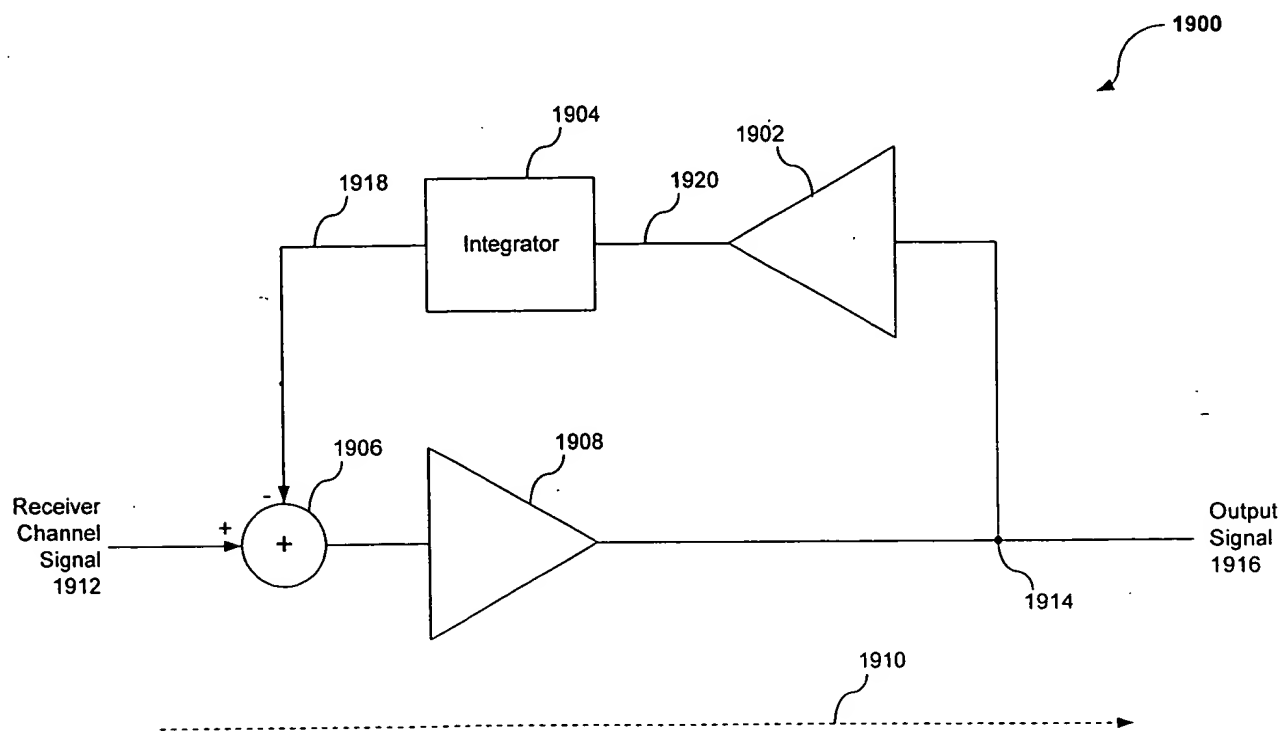


FIG. 19



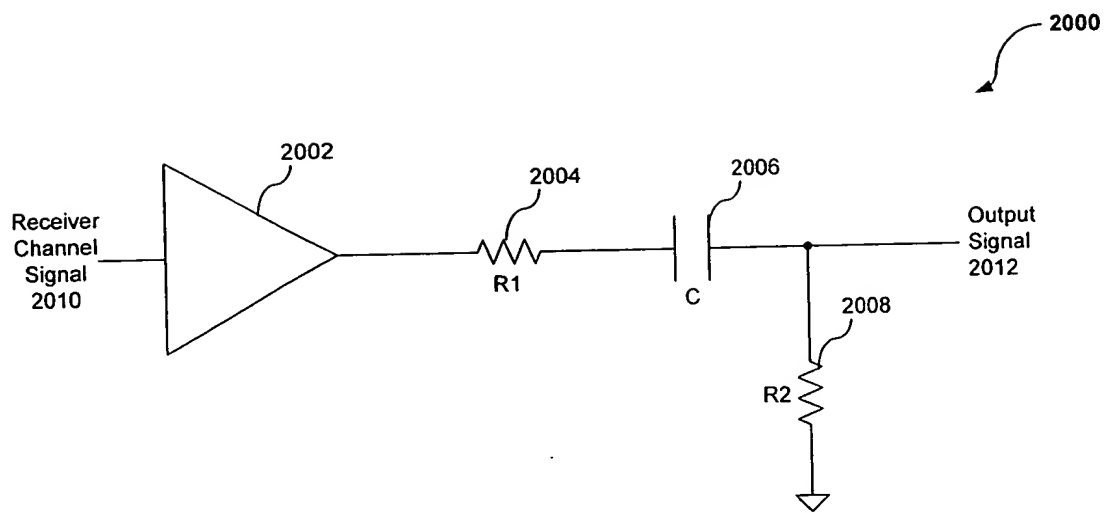


FIG. 20

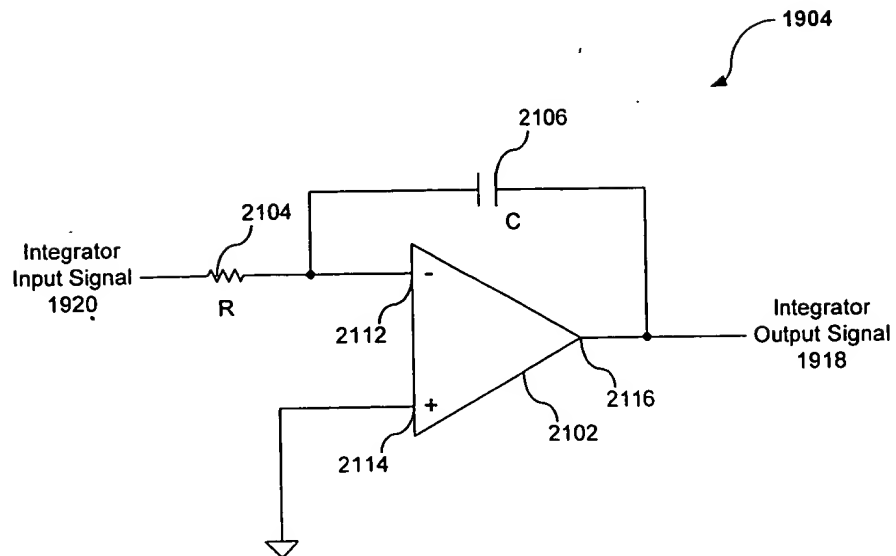


FIG. 21

FIG. 20

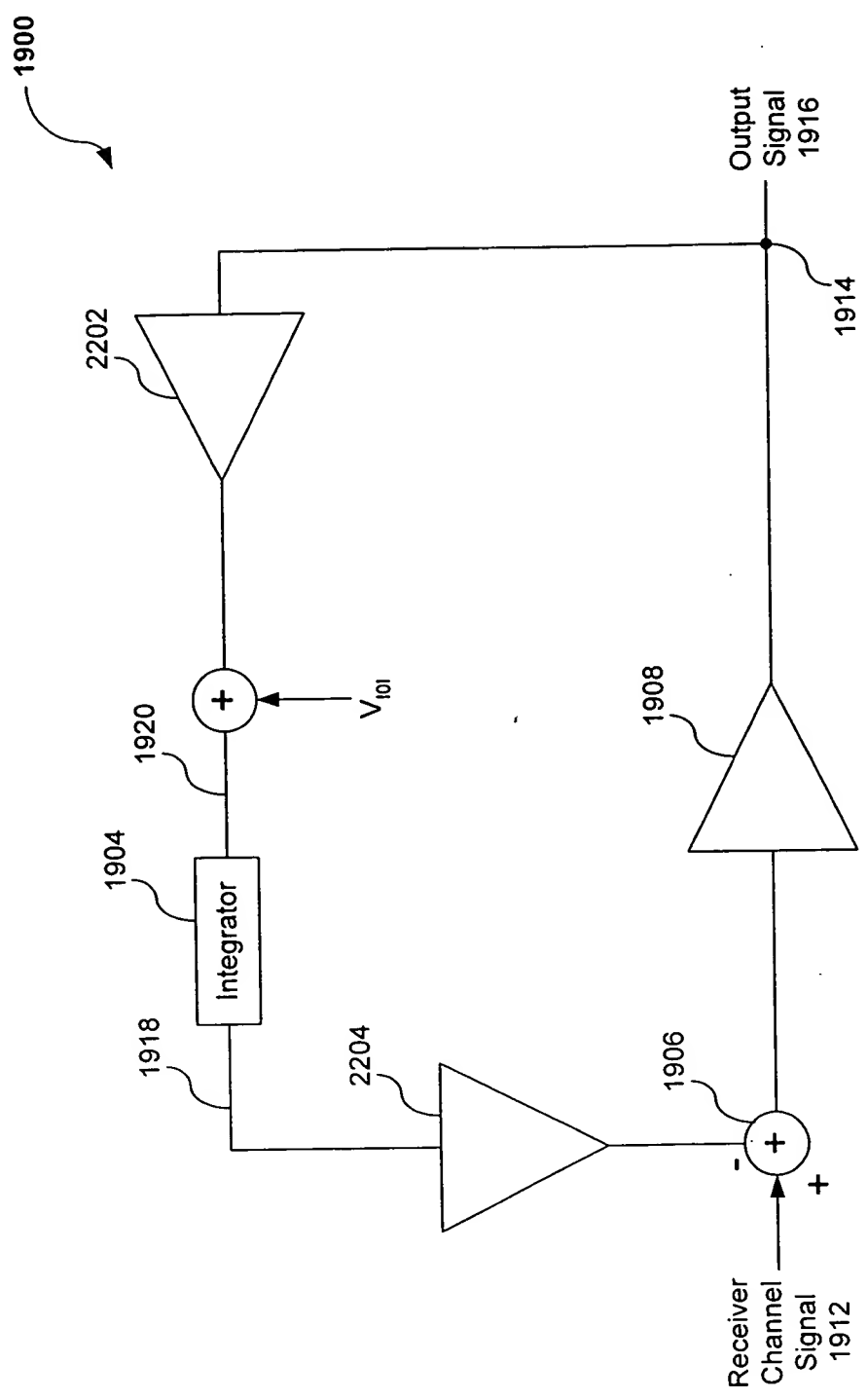


FIG. 22

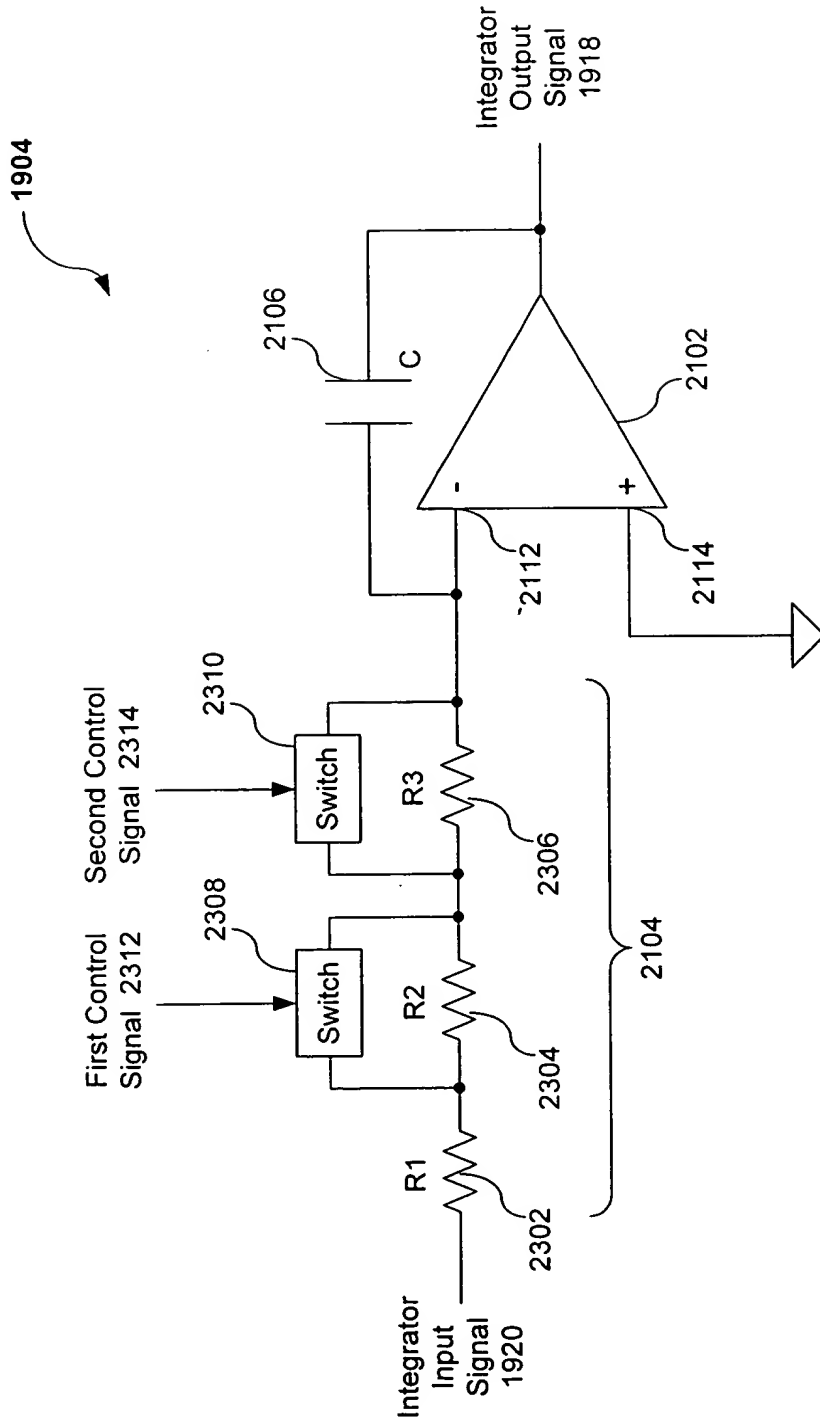


FIG. 23

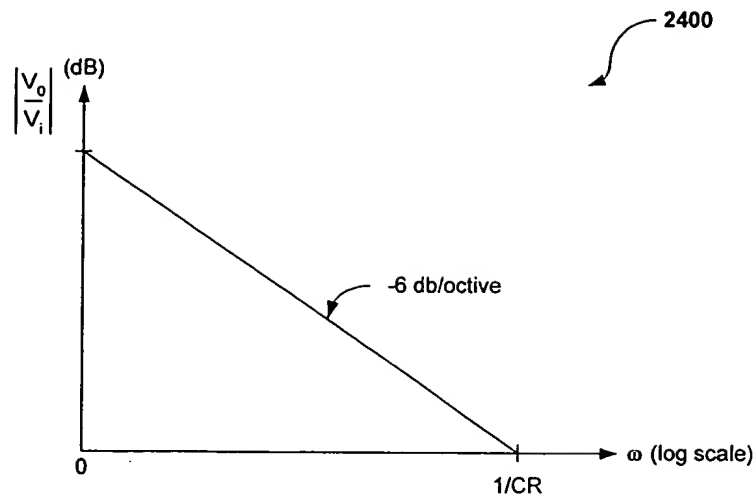


FIG. 24A

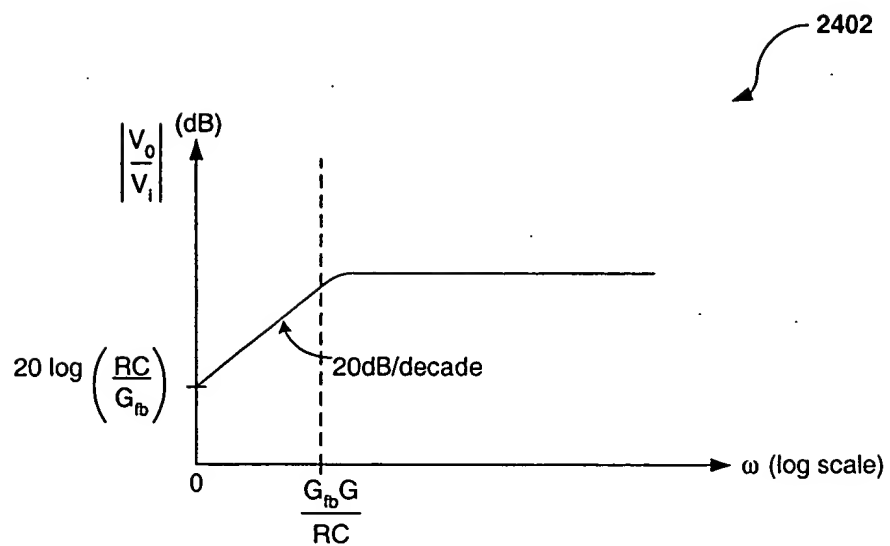
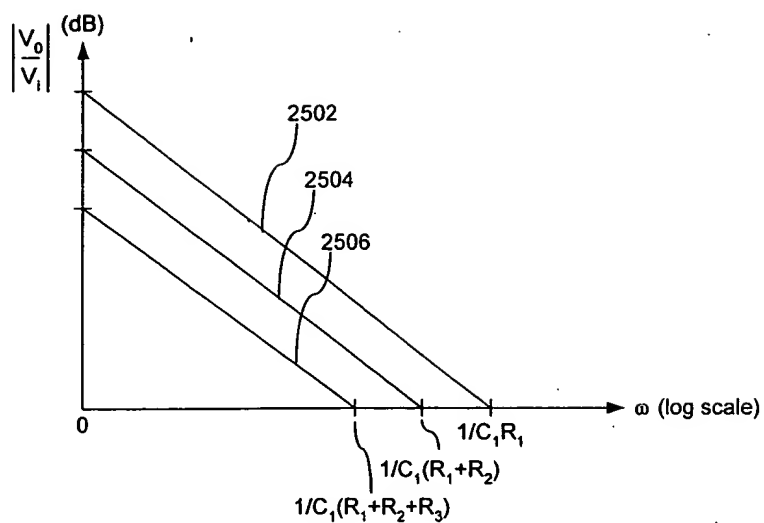


FIG. 24B



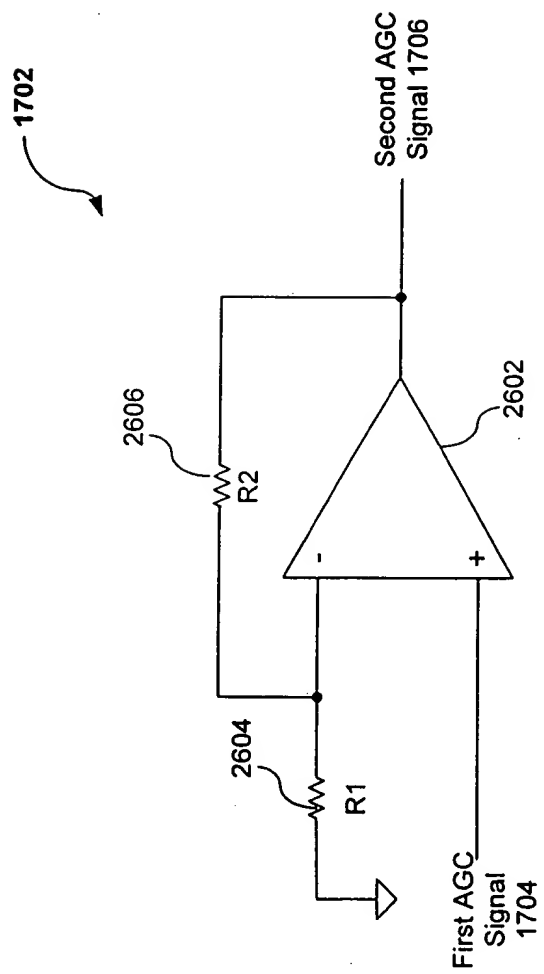


FIG. 26

2700

2702

a first receiver channel signal is received from a first receiver channel node

2704

the first receiver channel signal is integrated to generate an integrated signal

2706

the integrated signal is summed with a second receiver channel signal at a second receiver channel node

FIG. 27

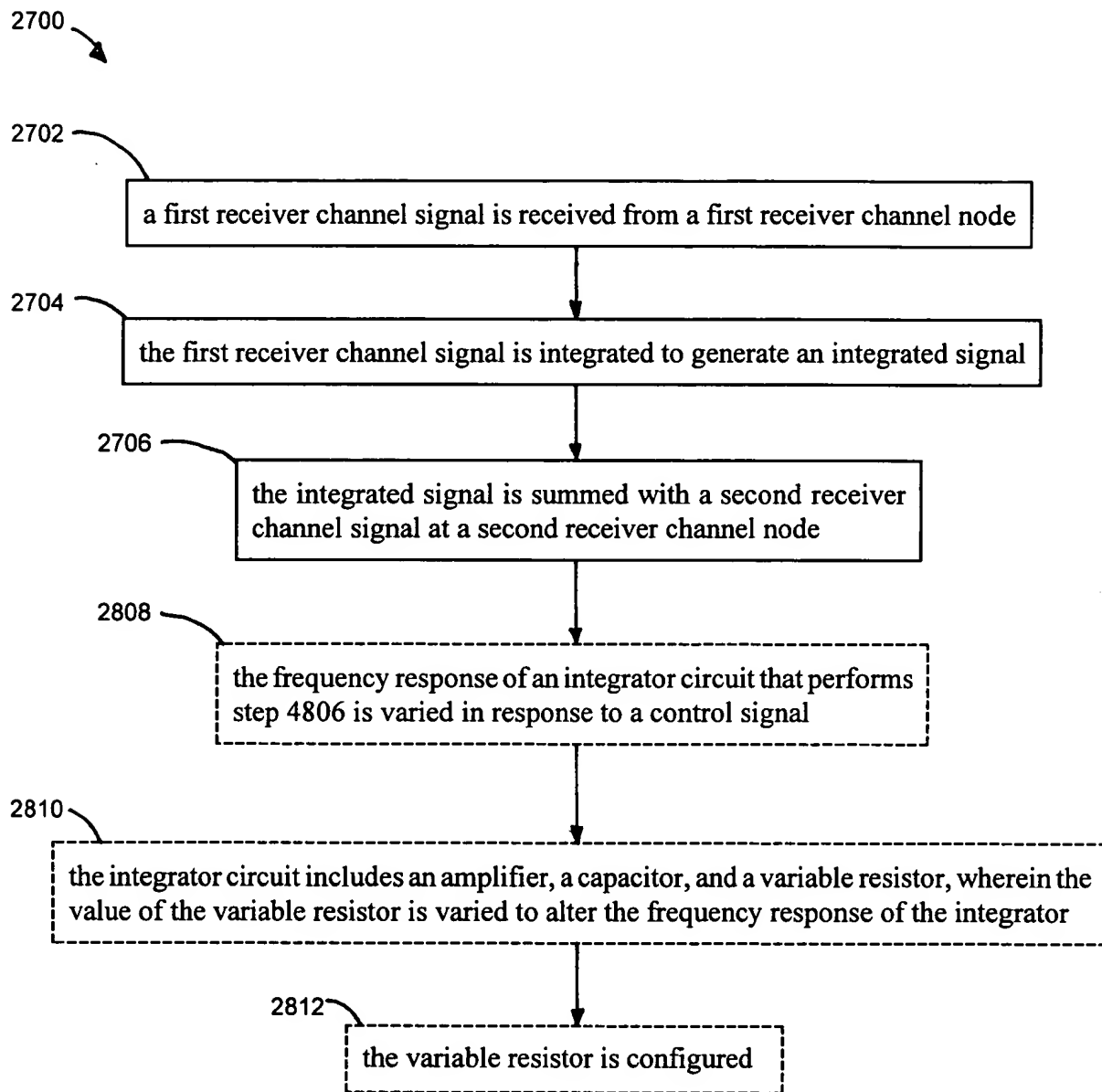


FIG. 28



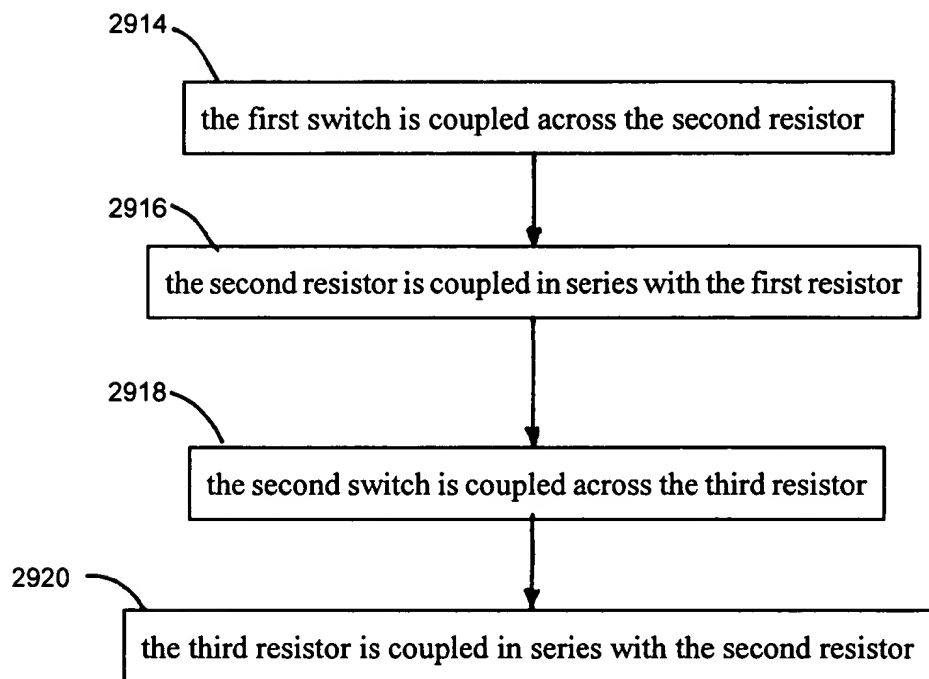


FIG. 29

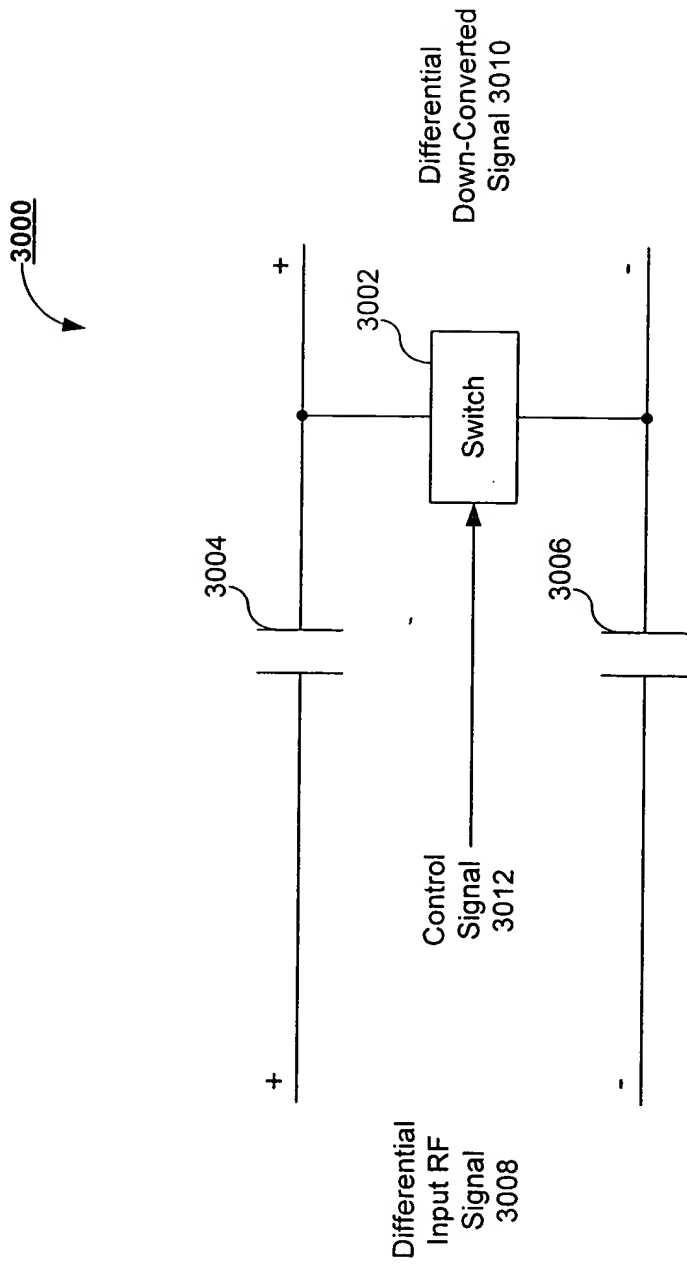


FIG. 30

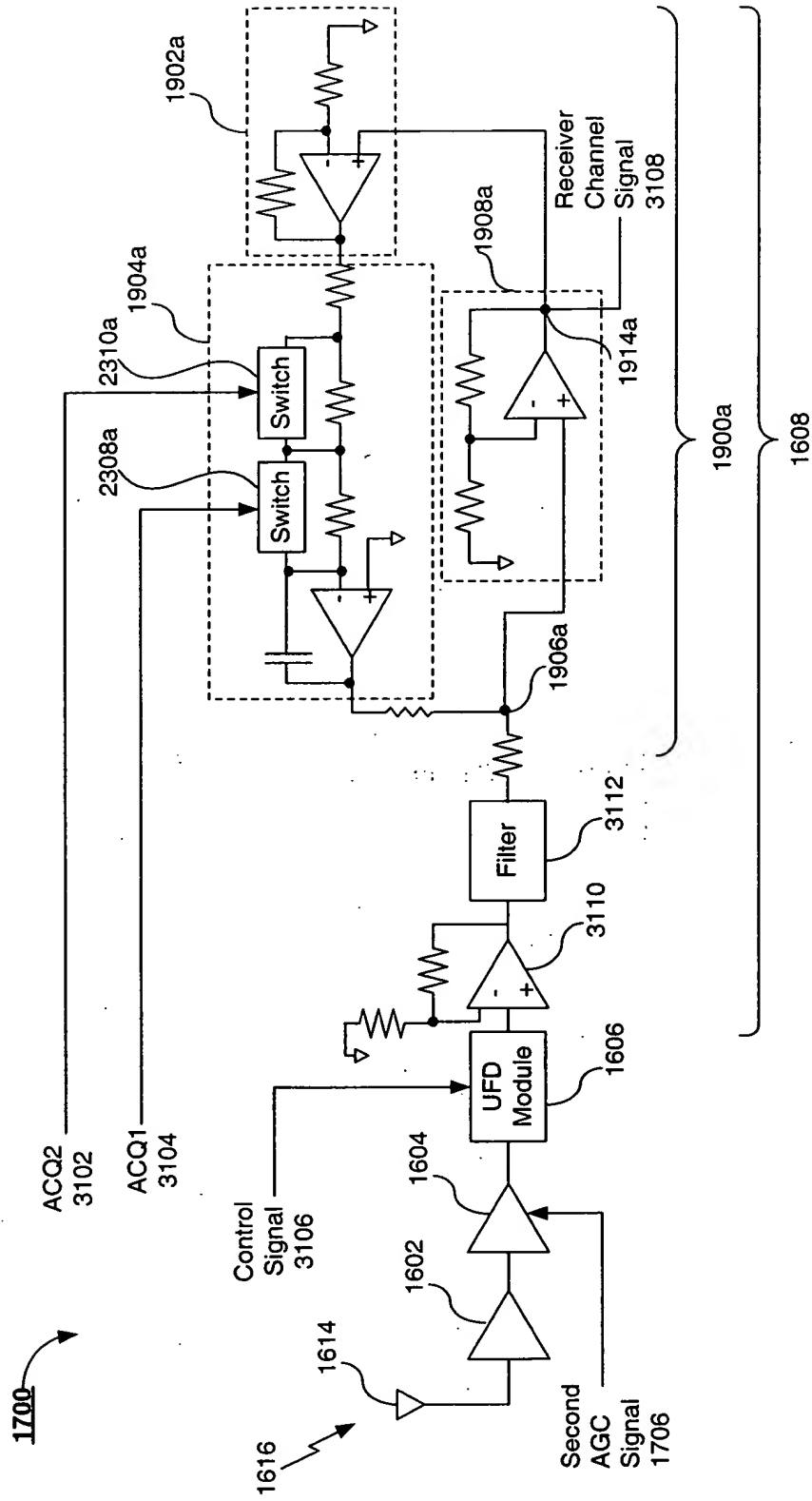


FIG. 31A

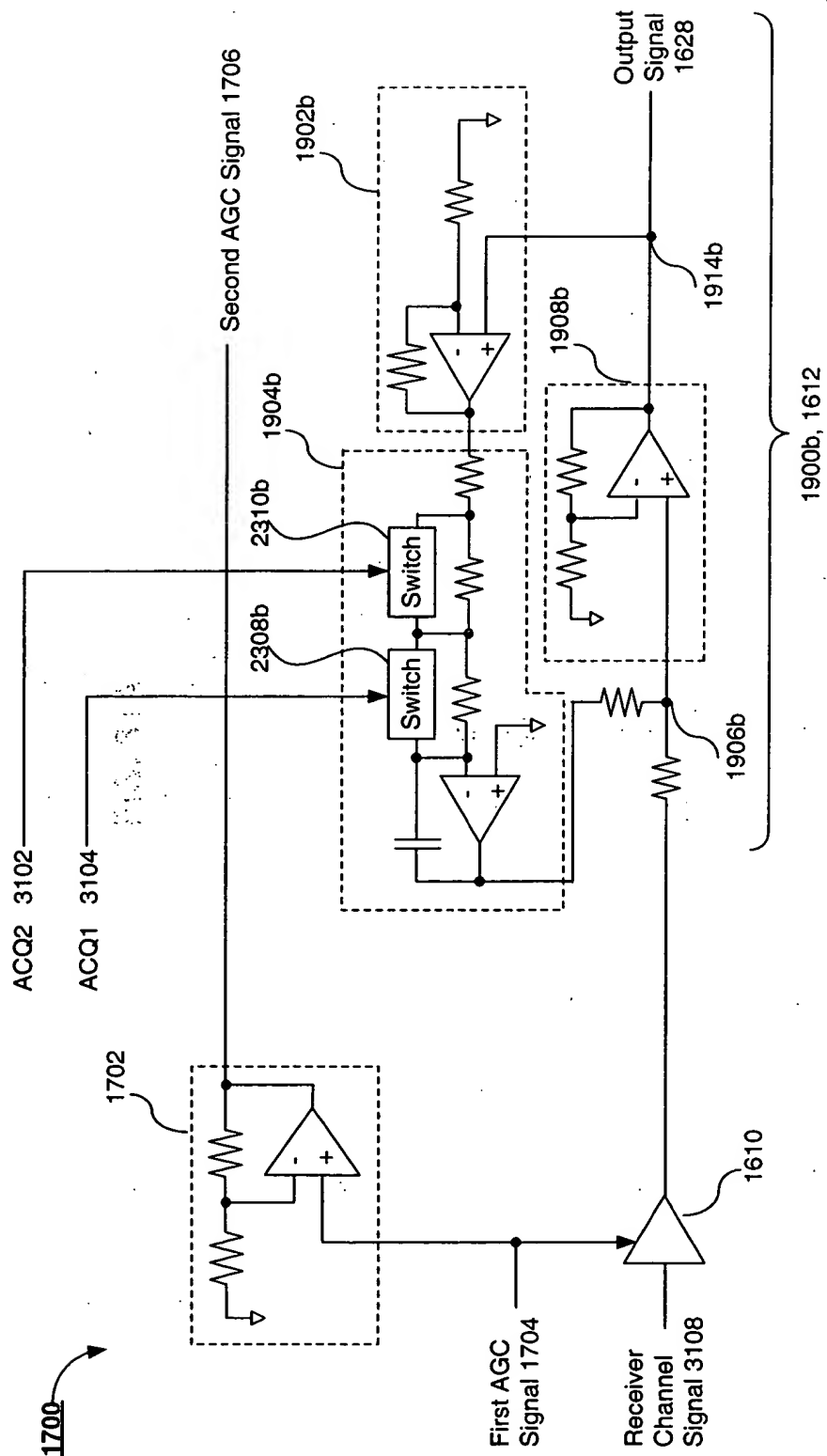


FIG. 31B

FIG. 32A

1700



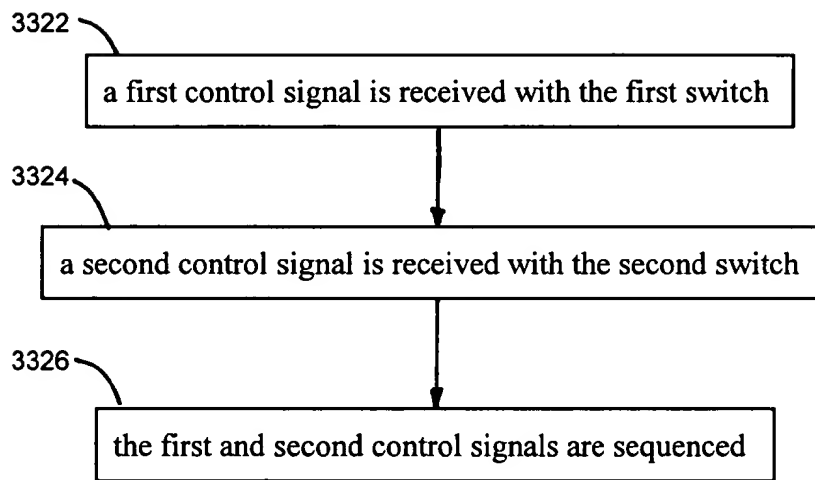


FIG. 33

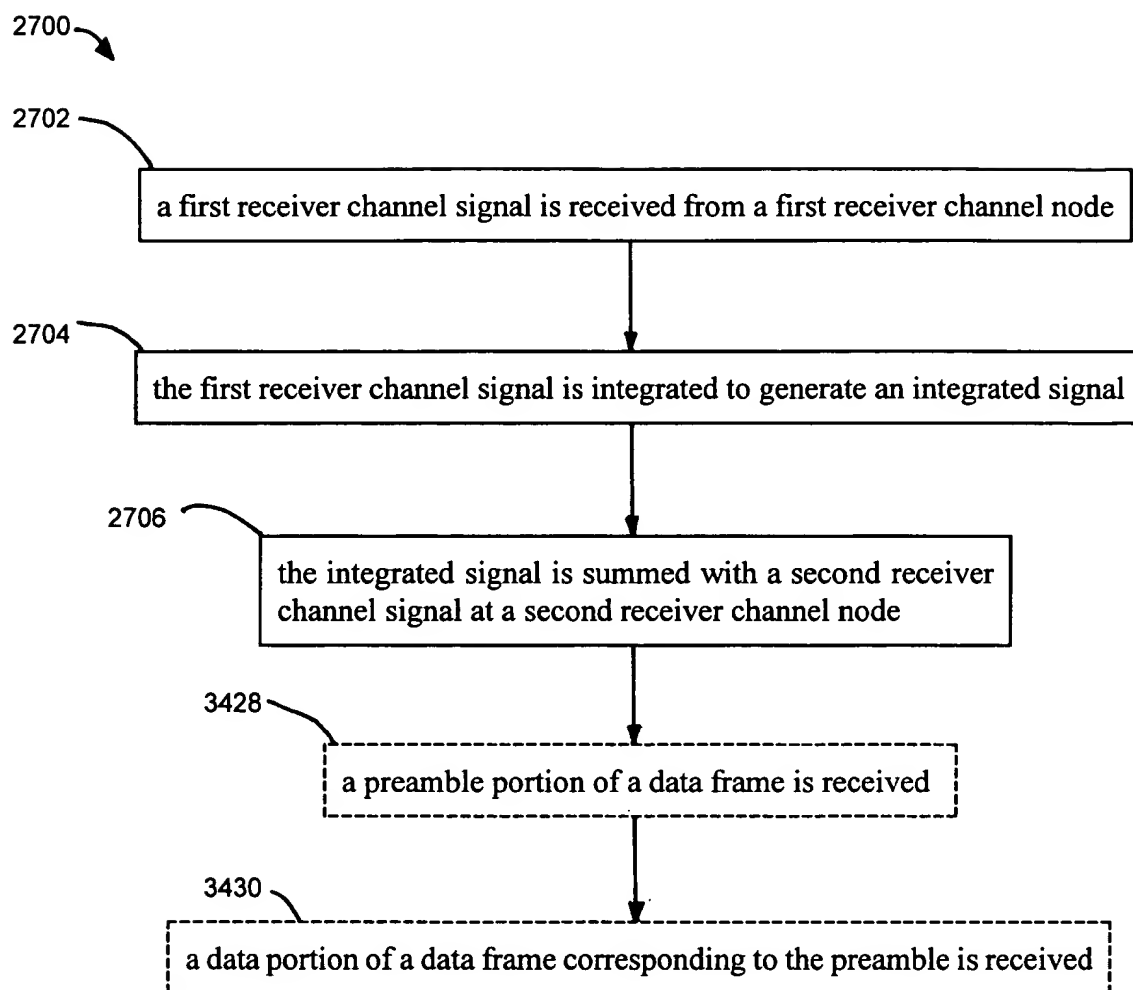


FIG. 34





TOP SECRET

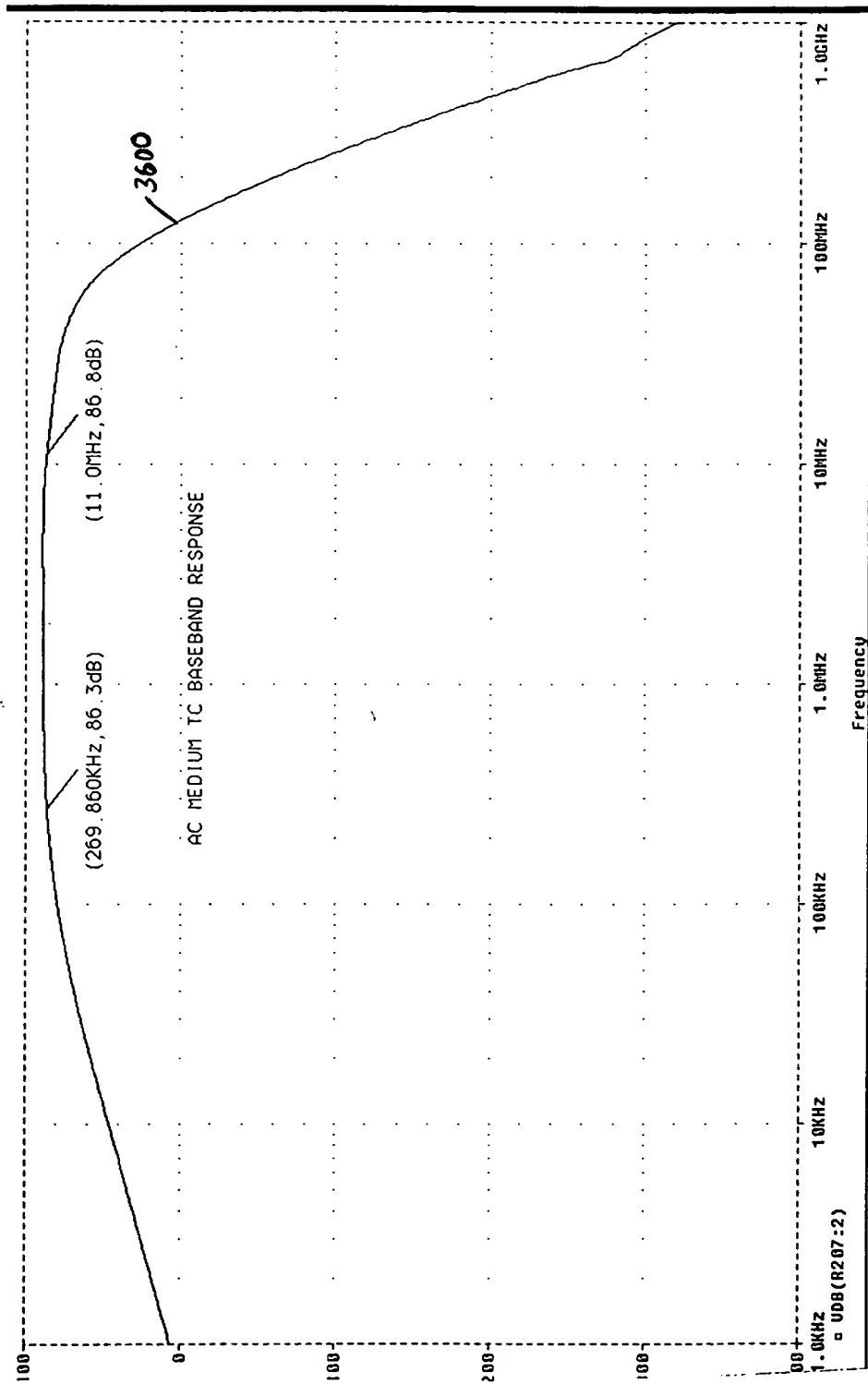


FIG. 36

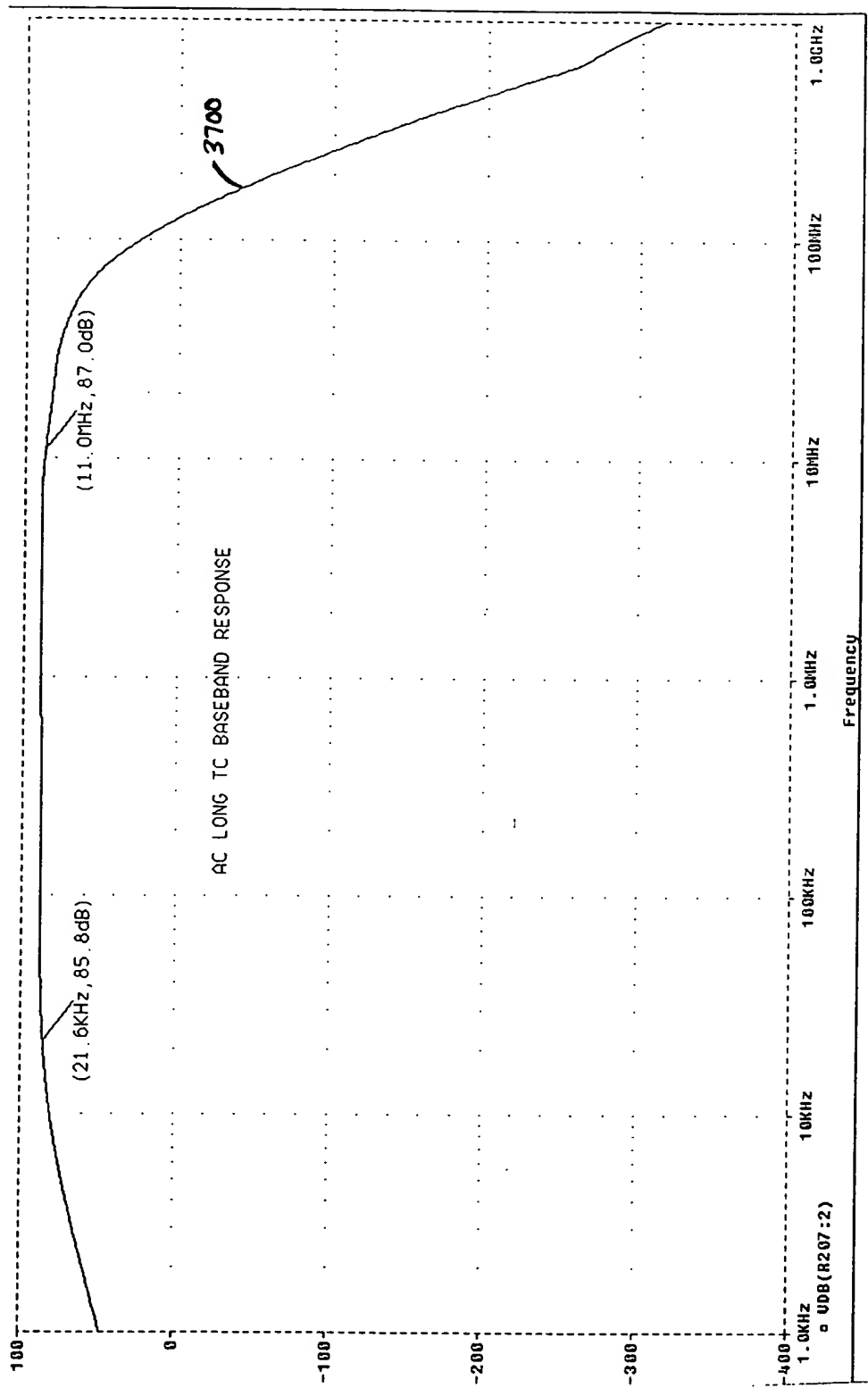


FIG. 37

FOOT 4925860

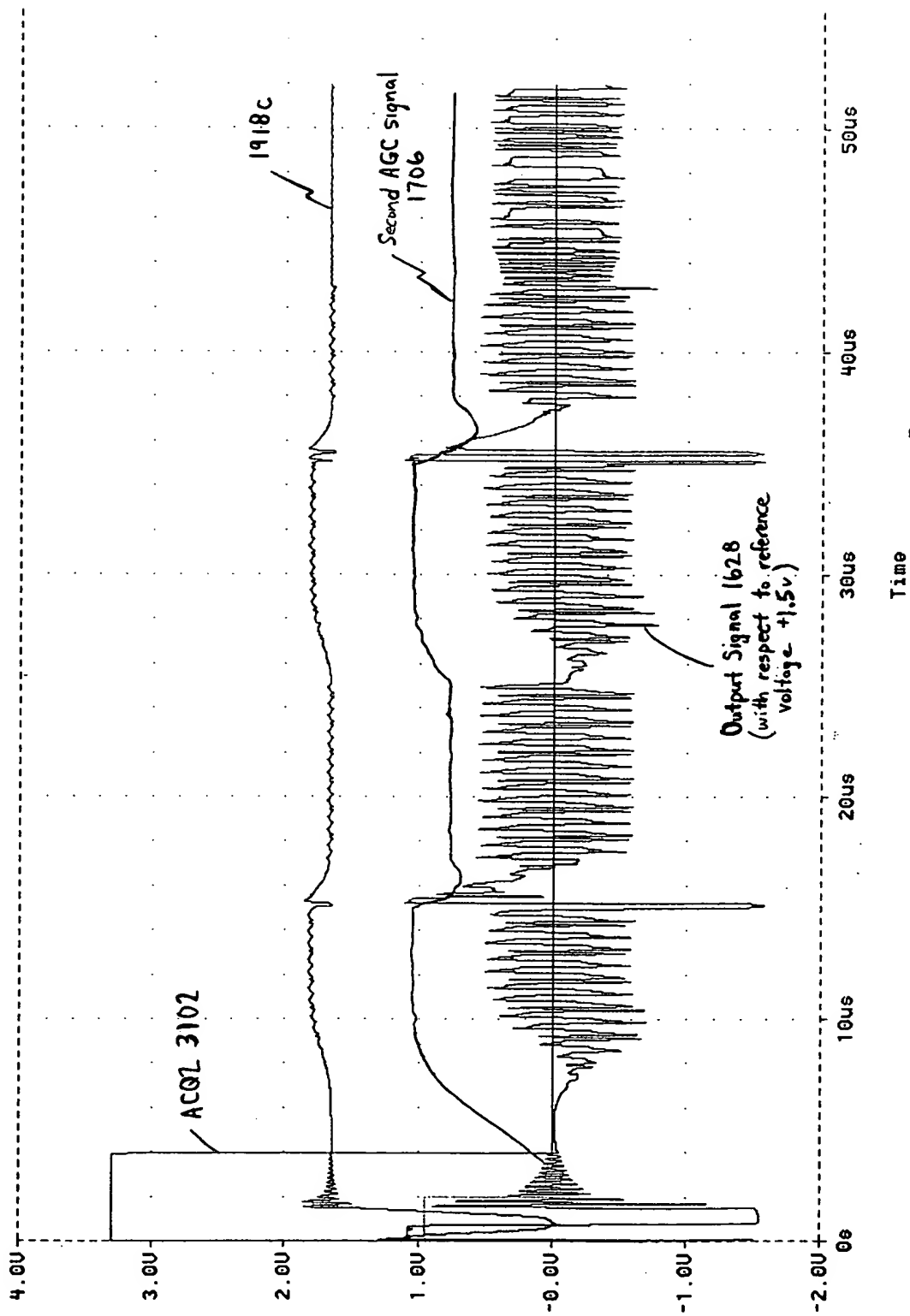


FIG. 38

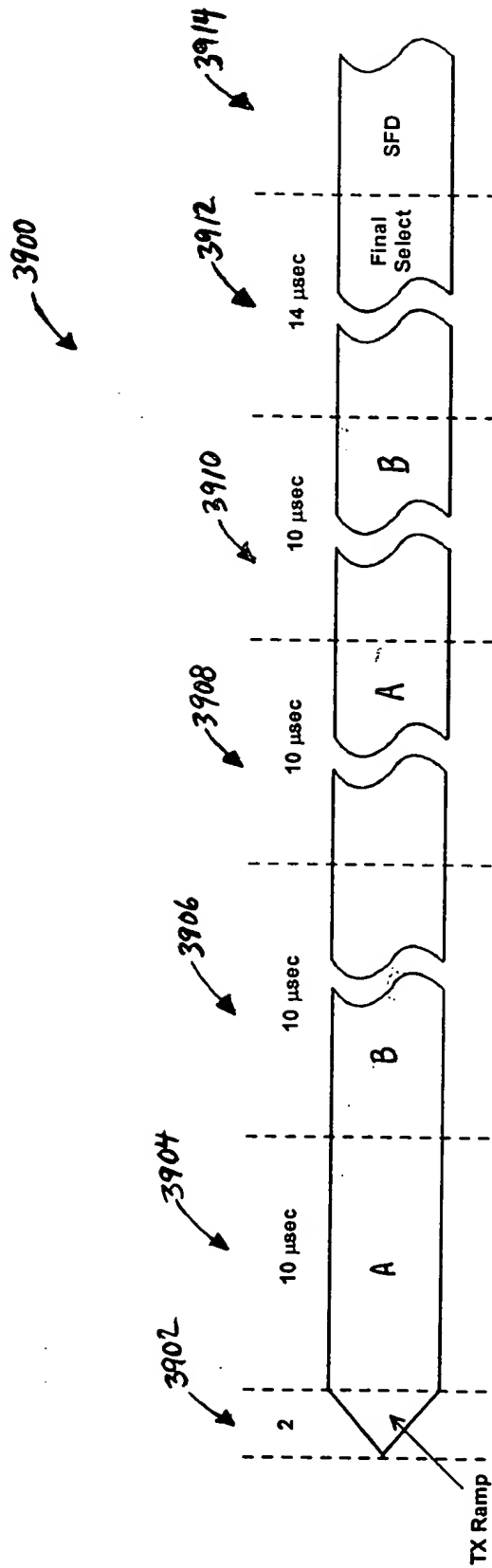


FIG. 39

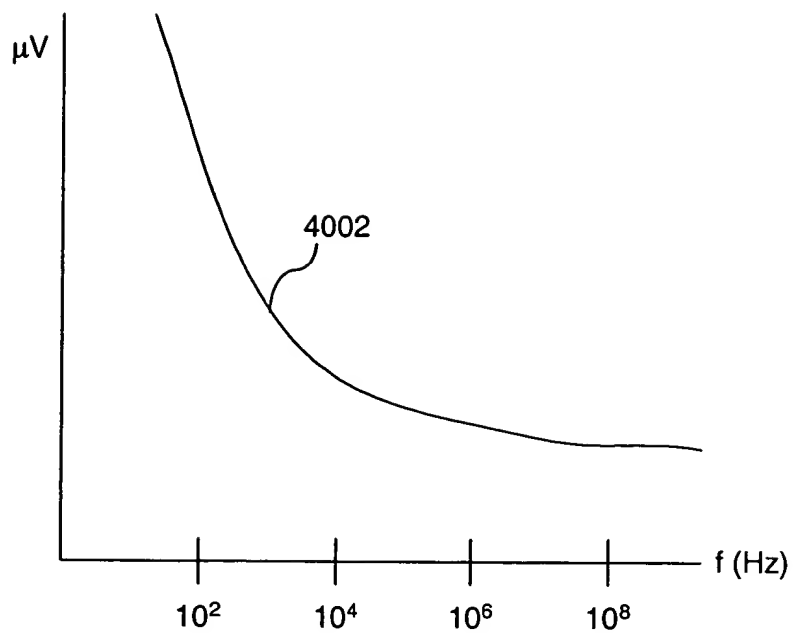


FIG. 40

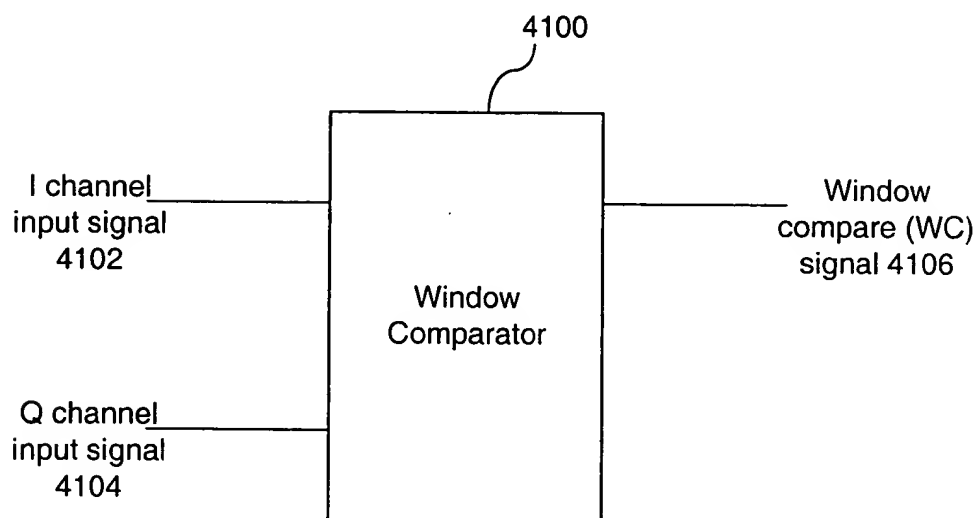


FIG. 41

FIG. 42

4100 →

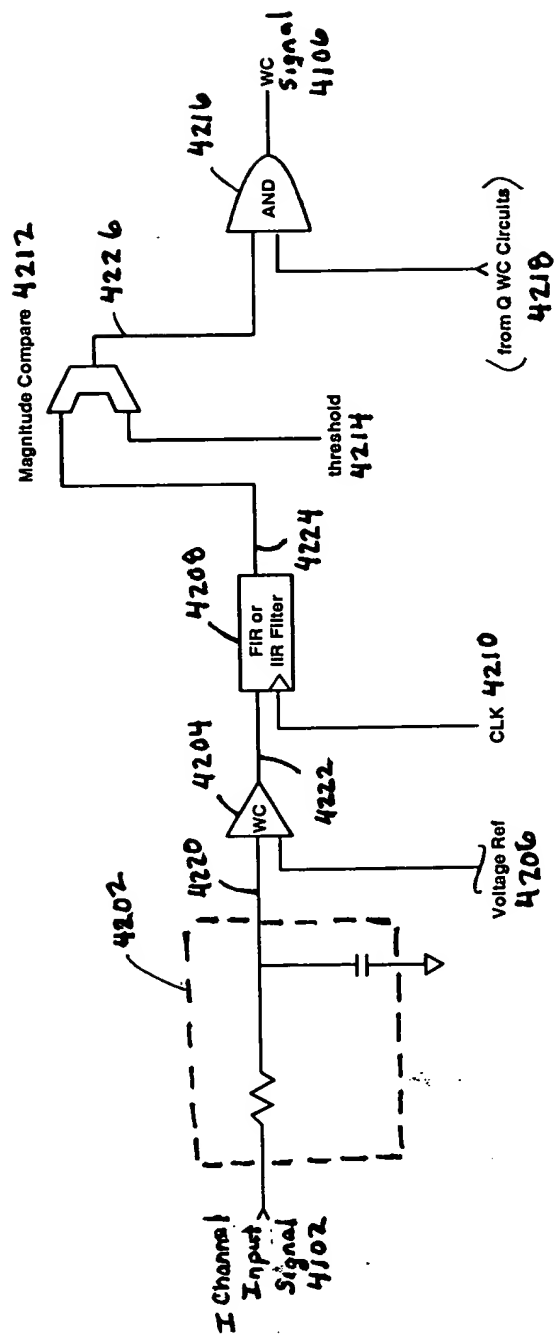


FIG. 42

4100

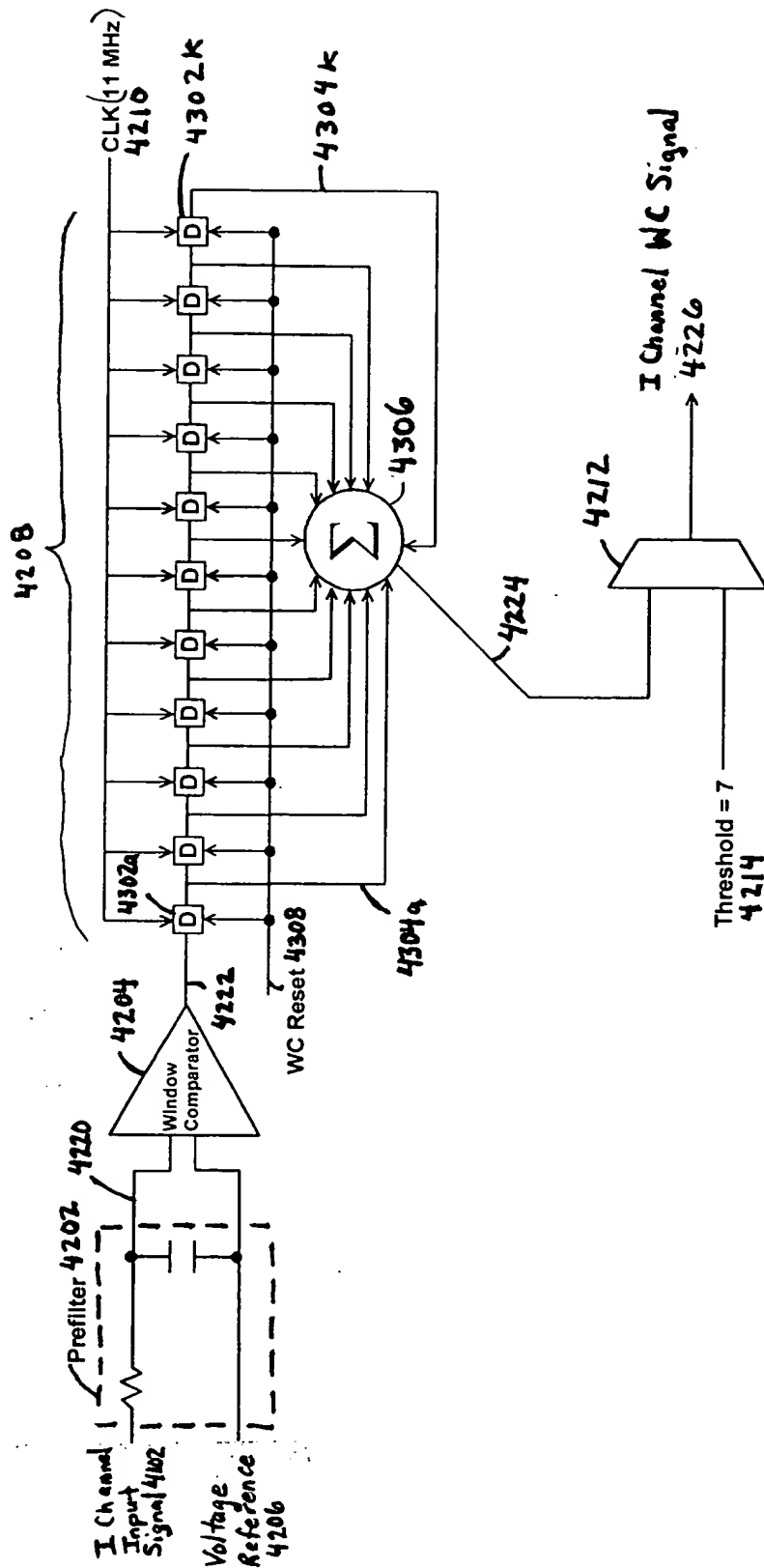


FIG. 43



FIG. 44

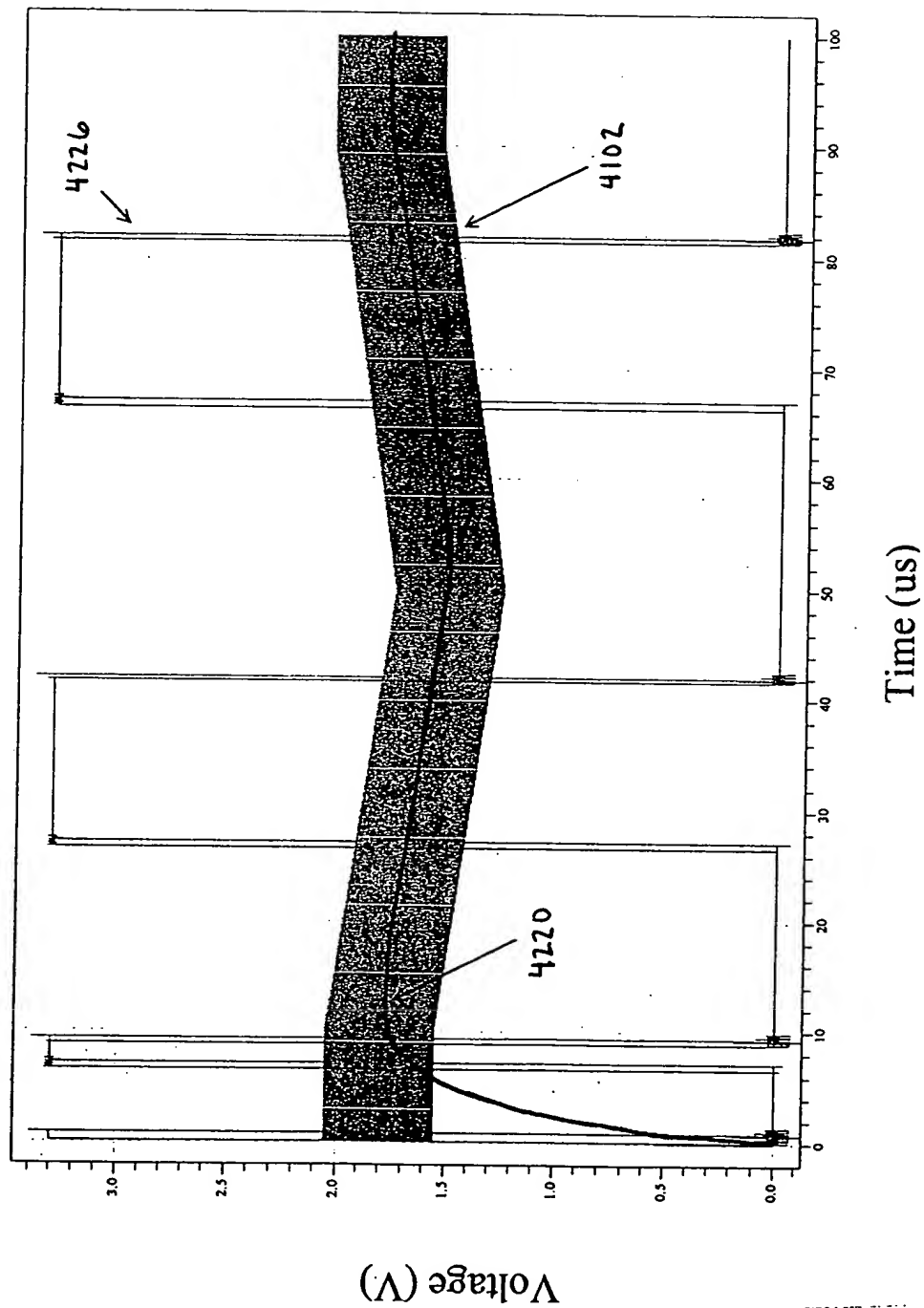
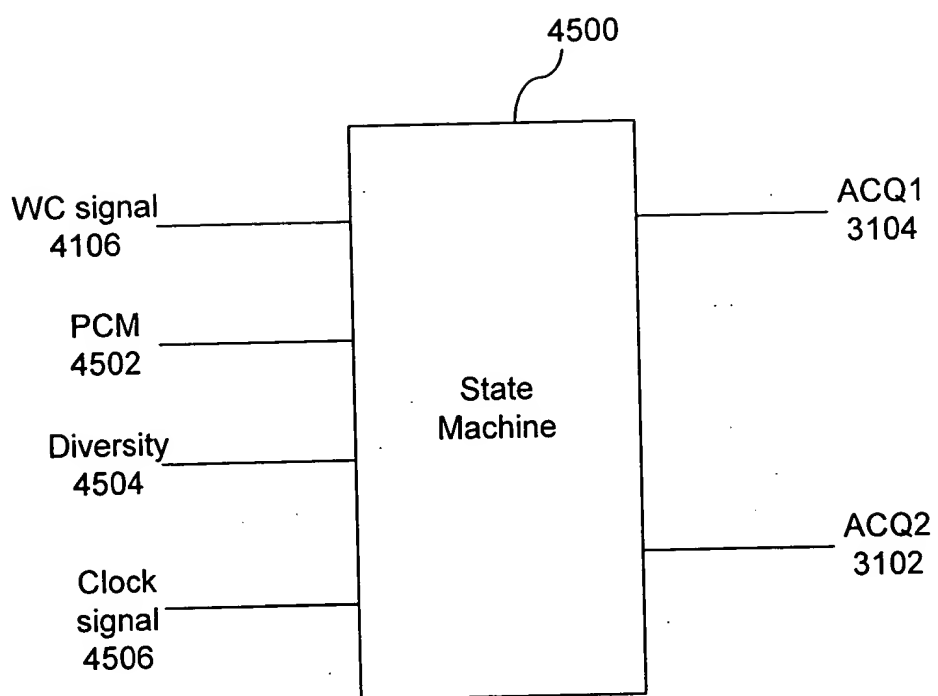


FIG. 44



**FIG. 45**

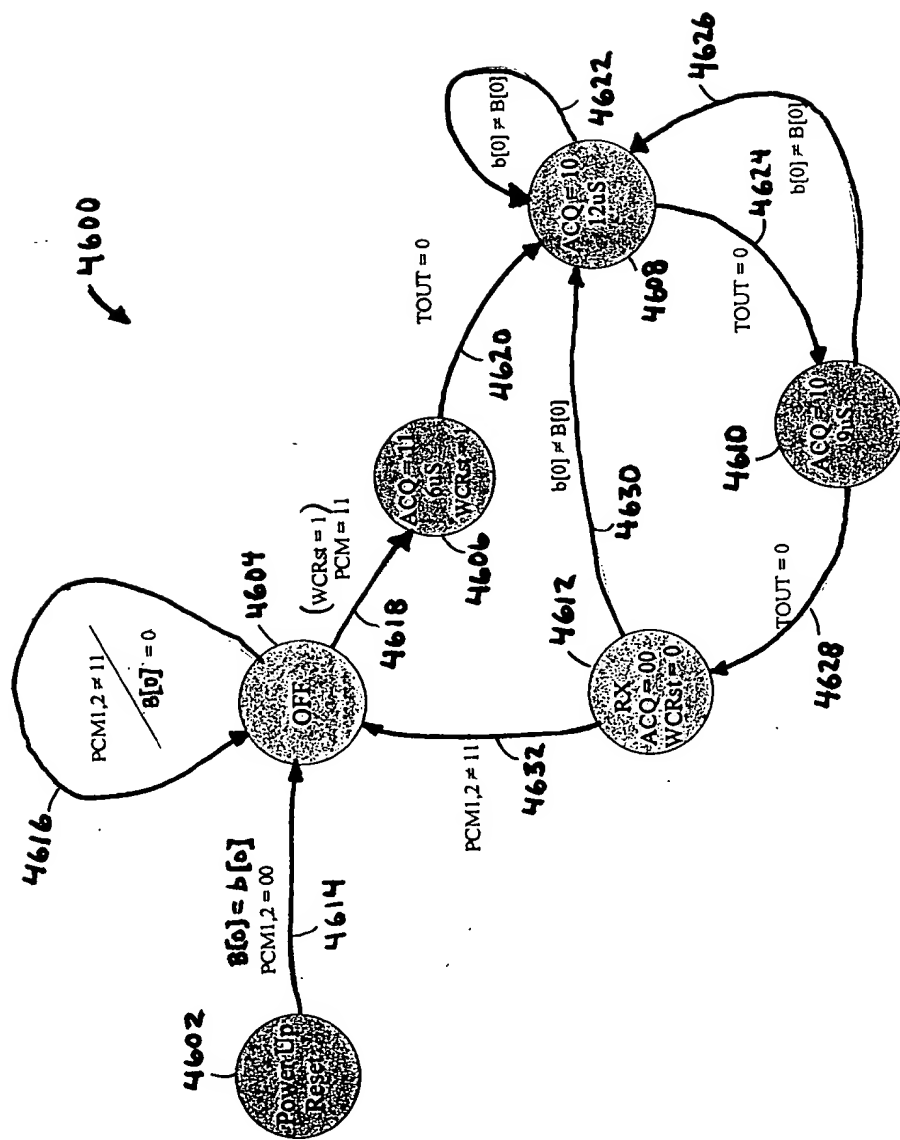


FIG. 46

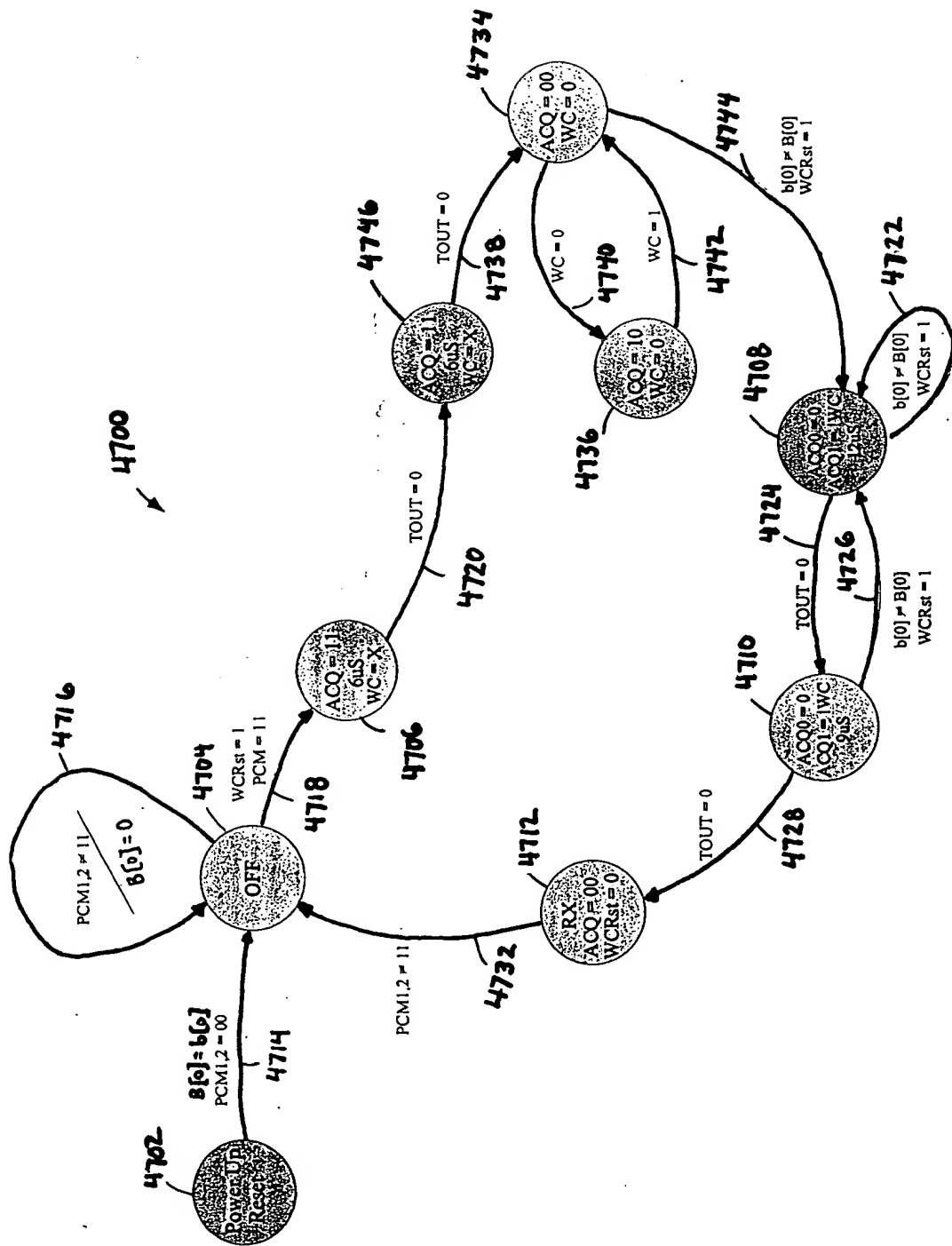


FIG. 47

4800

4802

a first AGC signal is multiplied by an amount to generate a second AGC signal

4804

the first AGC signal is provided to a first automatic gain control (AGC) amplifier coupled in a first portion of the receiver channel

4806

the second AGC signal is provided to a second AGC amplifier coupled in a second portion of the receiver channel

FIG. 48

4800

4802

a first AGC signal is multiplied by an amount to generate a second AGC signal

4804

the first AGC signal is provided to a first automatic gain control (AGC) amplifier coupled in a first portion of the receiver channel

4806

the second AGC signal is provided to a second AGC amplifier coupled in a second portion of the receiver channel

4908

The second AGC amplifier is located upstream in the receiver channel from the first AGC amplifier

FIG. 49

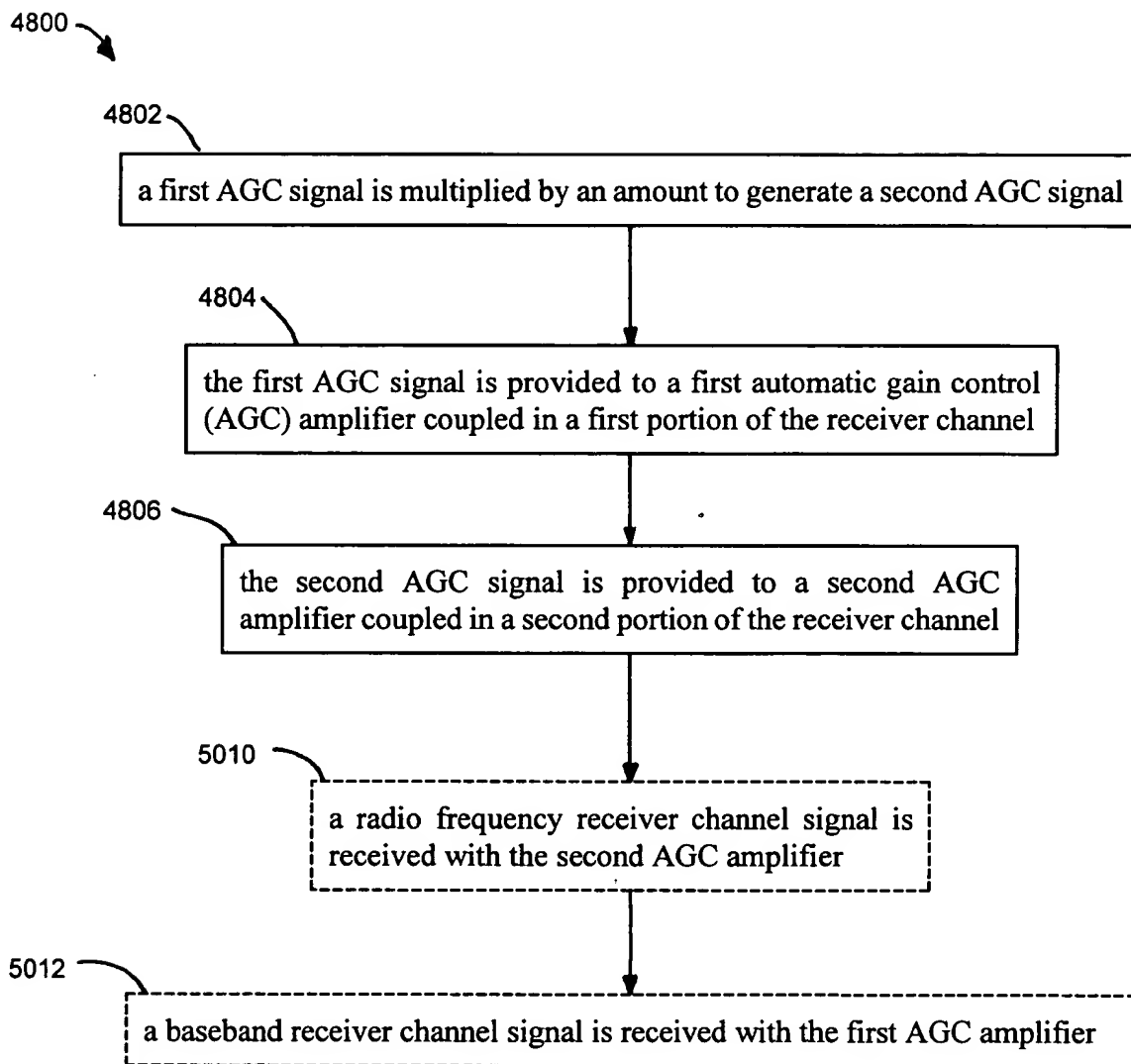
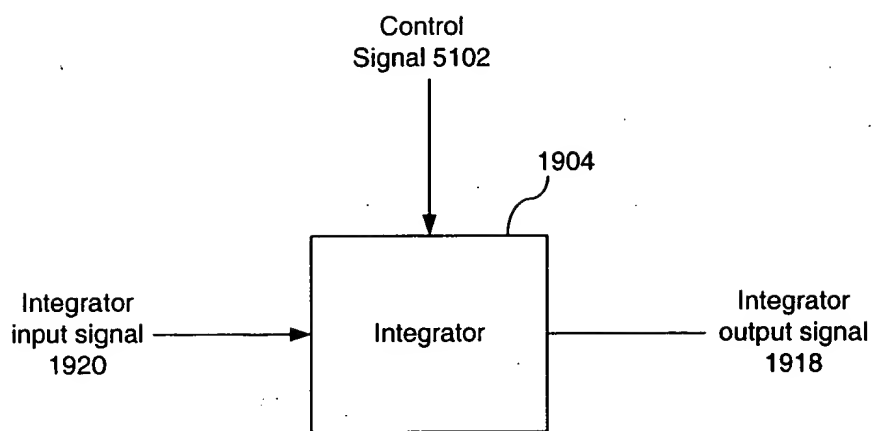


FIG. 50



**FIG. 51**



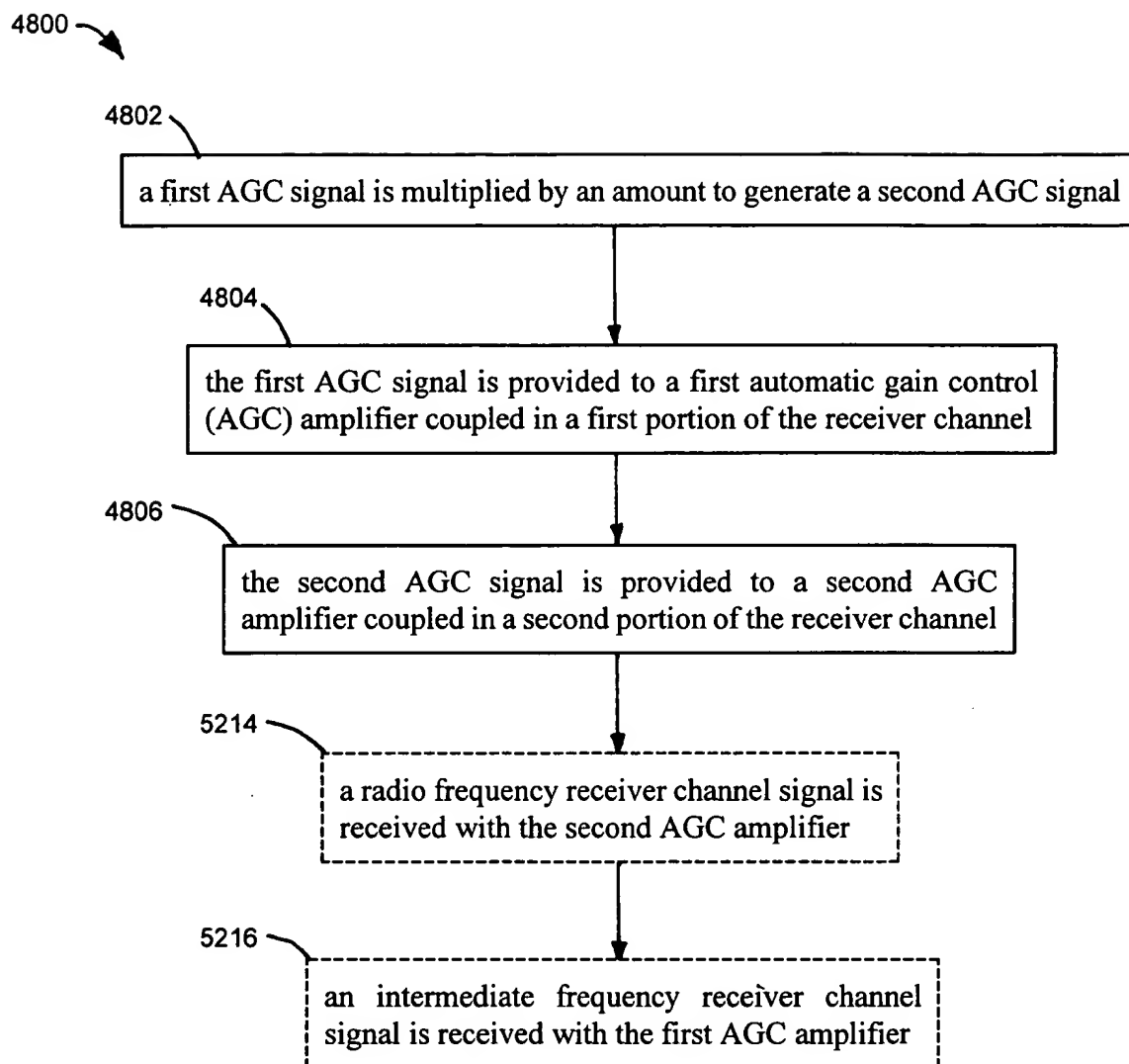


FIG. 52